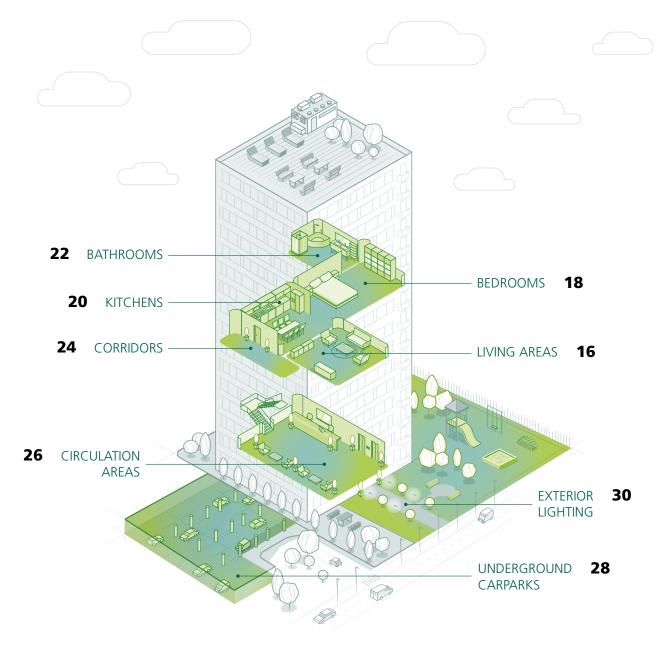
## SYLVANIA



Light your world



### **Content**

4

Challenges

6

Light design: from a functional to sensitive approach

8

Natural Light: a source of well-being and productivity (HCL)

10

Sylvania's Corporate Social Responsibility Commitment

12

Flexible and efficient Smart lighting solutions to suit your space

14

Lighting Standards

16

Living Areas

18

Bedrooms

20

Kitchens

**22**Bath

Bathrooms

24

Corridors & Stairways

26

Circulation Areas

28

Underground Carparks

**30** 

Exterior Lighting

**32** 

360 Services: Local expertise at your service

# **Transforming** residential lighting

The importance of cities in driving economic growth cannot be underestimated, which is why urban renewal is central to the recovery plans of many countries. Official statistics estimate the level of urbanisation will increase to above 80% by 2050.

Sustainable urban regeneration breathes new life into cities and increases the availability of residential buildings to accommodate the growth in urban populations, whilst preserving cultural identities and environmental commitments.

Lighting plays a crucial role in transforming buildings to meet the needs of modern living, combining aesthetics, functionality, and efficiency in the delivery of optimum lighting in all areas to ensure the comfort and safety of occupants.

Intelligent LED lighting solutions make significant contributions to the eco-performance of residential developments, delivering sustainable solutions that reduce energy by more than 80% and lowering carbon emissions. Smart technology limits usage by allowing greater lighting control, enabling it to adapt to levels of occupancy and natural light, further reducing the carbon footprint of a building.

### **Challenges**

K

### **HUMAN CHALLENGE**

The characteristics of modern life dictate that we spend up to 90% of our time indoors, increasing our reliance on artificial light to illuminate our surroundings.

Sylvania has developed a real Human Centric Lighting (HCL) solution covering the complete visible light spectrum which includes all the wavelengths for our wellbeing.

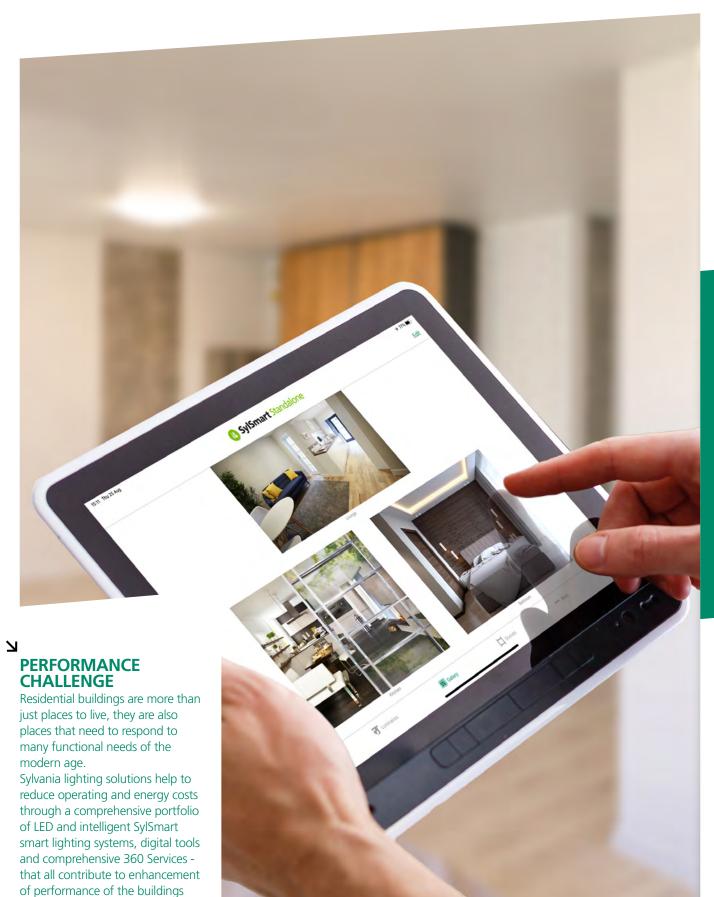




Z

### **ENVIRONMENTAL CHALLENGE**

The awareness of our ecological footprint is increasing the focus we need to place on reducing its size. The growing population in urban areas are driving the need for creating new residential spaces and rejuvenating old ones. This trend is creating increasing pressure to reduce energy consumption and improve efficiencies in residential buildings on a global scale, thus reducing the carbon footprint and moving to a net zero economy.



and can assist them acquiring highest sustainability standards &

certification.

### **Light design:**

### from a functional to sensitive approach

How interior spaces are designed and how they are illuminated extends beyond the functional aspects, which address the elements that our eyes need to see. Lighting design must also consider how our eyes experience what they see, as the artificial light which brings our homes to life has become an ergonomic and organic parameter in design. It is a focal point in controlling how we feel and how we do things, and a sensitive approach will reveal spaces in different ways at different times and enhance the way light is perceived.

### Light enables us to see

In optics, light is the phenomenon at the source of a visual sensation. The fundamental purpose of lighting design is to deliver enough light for people to see. Balanced lighting is essential in creating an environment appropriate for different parts of residential areas. People need to be able to move around safely outside or relax in comfort inside without the risk of injury. The increasing use of digital screens for access and security is a further consideration and artificial light must fulfil its core function without contrasting too much and posing a risk to eye health.

### Light is a structural element of space

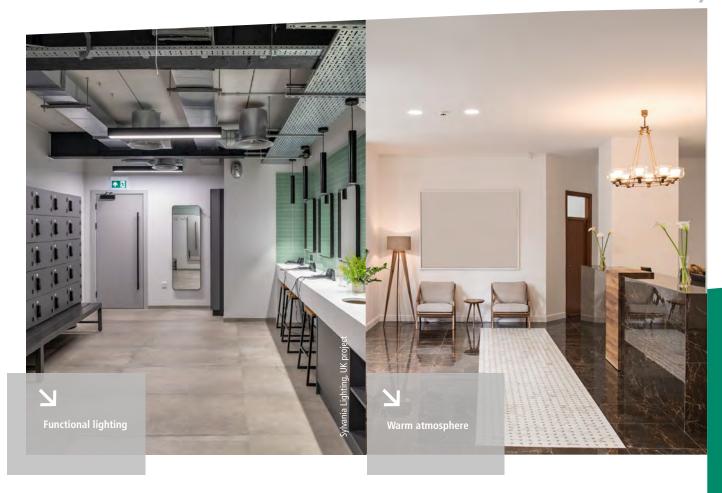
Lighting can unlock the potential of residential interiors and plays a critical role in interior design in both creating and defining space. In some environments, the motivation is to accentuate the beauty and in others, the role of lighting is to illuminate so occupiers can see clearly and navigate their route effectively and efficiently.

Light assumes an architectural dimension and allows space to be modulated in both a precise and subtle way. It discriminates the different volumes within a space, gives a clear hierarchy in the zones, and creates a tangible dynamic by playing with different sources, intensities of light, and types of luminaires. Residential development requires varied lighting to mirror the characteristics of specific areas and the different types of interactions people have with them. Light is only properly revealed by the presence of shadows. In a lighting design approach, light is not equally distributed, instead adapting to the specific features of the areas in which it's installed. This allows to give contrast and to guide the movement of occupants within a building, but also to structure an open space that perhaps has several usages such as a lobby area or shared recreation space.

### Light is emotional

In addition to providing visibility and the control of space, the third pillar of lighting design focuses on the experiences it creates. It's essential to define the objectives, functions, and emotions we seek to evoke in each space and striking a balance between these three elements is essential for a successful lighting project.





Lighting design gives valuable perspective to the importance of a sensitive approach to designing spaces by actively contributing to the wellbeing and comfort of the people that will use it. Whether you are looking to create a peaceful or energising atmosphere, the setting and choice of luminaires can be tailored to suit your needs.

Innovation has enabled lighting design to consider the full visible spectrum to provide a quality of lighting that gets close to replicating natural light. With the use of technical and theatrical photometry, we can create a variety of lighting effects suited to the different needs required in the many areas of a residential setting.

The flexibility and control available through considered lighting design can turn a house into a home, blending artificial and natural light to achieve the perfect quality and composition of light at any time of the day.

### **DID YOU KNOW?**

Lighting designers work together with architects and interior designers to conceive, structure, or renovate space. Lighting designers are both consultants and technicians, with a thorough approach to all aspects and functions of light.

Sylvania has an integrated research department of lighting designers who can assist you through the full life cycle of your project from design to installation. Expertise in bespoke design and construction, together with high-quality raw materials, allows them to create a vast range of configurations suited to any environment. As true masters of light, they can help you create a perfect atmosphere by harmonising your different spaces.

## WHAT'S PHOTOMETRY?

Photometry is the measurement of the brightness or intensity of visible light as perceived by the human eye. The measuring unit of illuminance is the lux, which indicates the amount of illumination a given surface unit receives.



"In some design exercises, you need attention to details, and you have many things to take into consideration. Lighting guides and recommendations are there to be used and understood, but certainly not blindly followed. Personal preferences, architecture, decorative elements, etc., are equally important to consider when making a decision whether to abide by or depart from standards."

Zsolt Bodzay, Head of Lighting Design, Feilo Sylvania International Group Kft

### **Human Centric Lighting (HCL)**

### **Natural light:**

### A source of well-being and productivity

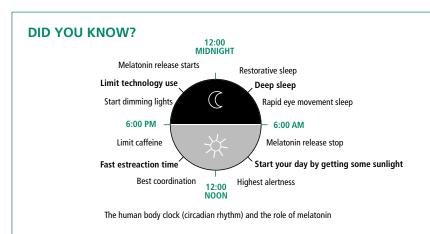
Established research suggests we spend up to 90% of our time indoors and are reliant on artificial light, meaning we are only benefiting from the natural benefits of sunlight for approximately 10% of our lives.

Natural light controls our circadian rhythms, which are the physical, mental, and behavioural changes that naturally occur throughout a 24-hour cycle and in response to changes in light. It is therefore intrinsically linked to our health and wellbeing and contributes to how much energy we have at different times of the day. Sylvania has developed true Human Centric Lighting (HCL) that creates the full spectrum of natural light visible to the human eye and enables artificial light to replicate the effects of natural daylight.

### The benefits of natural light

The role natural light plays in our everyday lives extends beyond allowing us to see the true colours of objects around us. It also influences how we behave and helps our bodies produce Vitamin D, which helps regulate certain nutrients needed to keep bones, teeth, and muscles healthy.

It also controls the quantity and quality of our sleep, which is directly linked to our capacity to function effectively during the day. Access to natural light can be limited in some residential developments, placing greater emphasis on artificial light that mimics daylights and boosts cognitive function, digestion, and levels of motivation. All these are elements which contribute to our ability to successfully perform everyday tasks and stay mentally and physically healthy.



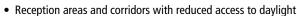
Melatonin is a natural hormone released by our bodies at night which regulates when we sleep, how long we sleep, and how well we sleep. Darkness causes us to produce more melatonin, which signals the body to sleep. Light has the converse effect, and the more we have the less melatonin we produce. Managing melatonin levels is crucial in maintaining well-being and a considered lighting solution can replace the benefits of sunlight by delivering the right light at the right time to people that spend a lot of time indoors at home either at work, rest, or play.





### Sylvania LumiNature marks a new era in human centric lighting: it recreates sunlight.

Its complete spectral curve with eliminated blue peaks and truest colours makes it one of the most natural artificial lights. LumiNature gives you something that even the sun cannot: dynamic lighting control. The SylSmart Standalone and Connected control options offer you full optimisation and tunability. LumiNature is the perfect solution to bring sunlight indoors and is ideal for:



- Areas with extended working hours (24h a day)
- · Residential spaces with limited access to windows





Revolutionary, human-centric light. Designed for better living.



#### Natural lighting and its many benefits

There are three principal benefits achieved when a residential environment is illuminated with a true HCL solution. First, it promotes eye comfort and visual awareness by perfectly rendering colours when relaxing or socialising at home. The second benefit is the control of our circadian rhythms and stimulation of good sleep quality, which increases our alertness during waking periods and enhances our concentration levels and performance.

Finally, it contributes to the control of melatonin levels in our bodies, which is paramount for our general health and well-being. By perfectly balancing these benefits, Sylvania LumiNature responds to the lighting challenges of today and ensures it's capable of meeting those we face in future.

#### **LumiNature in residential settings**

Sylvania LumiNature marks a new era in human-centric lighting with the capacity to recreate sunlight. Its complete spectral curve eliminates blue peaks and delivers optimal colour reproduction making it one of the most natural artificial lights available.

LumiNature also gives dynamic lighting control and the ability to tailor the lighting to suit specific room needs. The SylSmart Standalone and Connected control options offer further control and optimisation capabilities.

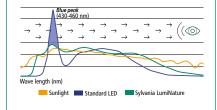
LumiNature is ideal for:

- Reception areas, corridors, storage areas and car parks
- Areas with extended or 24/7 working hours
- Rooms and spaces in residential developments with few or no windows

#### **HCL, TUNABLE WHITE:**

While many lighting solutions claim to be Human Centric Lighting (HCL), their only focus is on controlling the intensity and colour temperature of light between warm and cool white. These are Tunable white solutions and do not eliminate the blue peak which occurs between 430-460 nanometres.

LumiNature by Sylvania is the only HCL solution available that provides the highest levels of artificial light that align with the effects of natural light.





"Light is a biological synchronizer. Its function is not only to see, but also to coordinate living things. LumiNature is the first solution allowing a real action on our biological clock by regulating our melatonin secretion according to the time of day. LumiNature energizes us and offers us a healthy and rich light during the day with a high Melanopic Ratio (>4000K), while for night-time applications, we can instead make the light soothing with a low MR (<3000K)."

Yann Chevrier, Deal Manager at Feilo Sylvania France

# Committed to sustainable lighting solutions

Each time we develop a new product and service we engage sustainable practices to deliver optimal lighting solutions while minimising our environmental impact. We employ comprehensive waste and energy conservation protocols that involve everyone in the business and extend to all areas of our operations.

We believe a responsible business is a healthy business and the prosperity of business and society is closely connected. Our mission is to bring technology, creativity, and innovation together through our products, services, and people to enhance energy efficiency, improve sustainability, increase connectivity, and promote wellbeing.

By mobilising our collective strength and strategic commitments to focus on creating healthy communities and a healthy environment, we can achieve long-term value and have a positive impact on society.



### **Recognised for our contribution**

Sylvania is a business with a culture that places its people at the centre of all it does. We provide a professional, inclusive environment that helps our employees excel at everything they do, with policies in place to ensure we continue to evolve and adapt to the world around us. We want a career with Sylvania to be challenging, rewarding, and fulfilling, where our people can reach their potential both personally and professionally.

We are a progressive and innovative global business dedicated to delivering excellent products and services to our customers and an inclusive work environment for our employees. We value our people, their experience, their ideas, and their contribution and we thrive on empowering each other so we can grow and develop together.

#### Intelligent lighting for the future

Sylvania invests in delivering advanced solutions that enhance people's lives and help create better environments. Innovations such as SylSmart and 360 services offer so much more than quality lighting solutions, they represent the foundations on which future innovation can be built and deliver sustainable cost and energy efficiencies.

Our approach to creating an inclusive and sustainable business is recognised through our bronze certification from Ecovadis, one of the world's most recognised business sustainability ratings. This measures non-financial management systems and sits alongside our internal metrics, which we evaluate against industry best practices in a global context and employ continuous improvement principles to ensure we remain ahead in our market.





### Made in Europe

Our heritage as a leading manufacturer of quality lighting solutions dates back more than 100 years and we are proud of our history of European production. With manufacturing and R&D facilities located in France, Germany, and the UK we can design, develop, and produce innovative lighting solutions and deliver them to market with pace and agility whilst significantly reducing our carbon footprint.

Our European facilities are ISO9001, ISO14001, and ISO50001 certified, underlining our alignment with the principles of responsible manufacturing, and our continued commitment to reducing emissions and managing our waste.

Technology plays a critical role in increasing energy efficiency while enhancing luminaire performance and our comprehensive portfolio contains an extensive range of lighting solutions manufactured to the highest quality standards that offer extended lifetimes.

We take responsibility for managing the full life cycle of products and have plans to embrace the principles of the circular economy in our approach to sustainability on future product development projects. Placing greater emphasis on product design helps us proactively reduce emissions and manage waste and encouraging their sustainable consumption keeps them in active use for longer. The interchangeable components of some of our products increases their lifecycle and makes them in-line with our circular economy approach.

#### Sylvania's CSR pledge by 2030



To become a net-zero emissions company



All company cars to become electrical



To create and implement a circular economy business model



"Sylvania is a responsible business. We strive to comply with the highest quality standards when it comes to our employees, customers, partners, and the environment. The commitment to our new CSR strategy is to improve and increase the sustainability of the company and all our stakeholders based on three main pillars - environment, social and governance (ESG). We have a clear vision for our future, we have the people to make the change and I strongly believe that collectively we can become a net-zero business by 2030. We will do this for ourselves and for the generations to come."

### Flexible and efficient

### Smart lighting solutions to suit your space

When creating a lighting design, thought should be given to how it is controlled as well as the financial and environmental costs. Whilst the comfort of occupants should remain the core consideration, modern society demands the delivery of sustainable solutions where comfort, simplicity, energy-efficiency, and a respect for the environment can be equally reconciled. With increasing regulations and standards targeting energy consumption in residential buildings it is essential to select a solution that minimises energy usage.

#### Home / Communal areas



### SylSmart Standalone

Maximum control. Minimum installation. A wireless, plug-and-play lighting control solution perfect for smaller applications where ease of installation and crafting of light is paramount.

### **Easy to Install**

Plug and play design with in app set up and no additional control wiring required.

Call personalised scenes and animations including RGB and TW at the touch of a button via the application or wireless wall switch.

#### **Energy efficient**

Customisable energy saving features based on time, occupancy and daylight. App driven maintenance and minimal disruption.

#### **Secure**

High encryption by the Bluetooth mesh. Select access levels by user: sharing, administrator only, password protected & open network.

### **Communal / Functional Areas**



### SylSmart Connected

Unlock the intelligent building. Using wireless mesh communication technology, SylSmart Connected offers an ideal solution that's easy to install, has low initial costs, and is low maintenance.

### **Integrated Intelligence**

Multifunctional sensors in each luminaire, the system delivers secure wireless communication with distributed intelligence and reliable performance.

### **Rapid installation & Effortless scalability**

No additional wires or hardware is required, with offsite cloud based preconfiguration minimum on site disruption is achieved. Easy to scale to any project size from single floors to entire building.

#### **Energy efficient**

Customisable energy saving features based on time, occupancy and daylight. App driven maintenance and minimal disruption.

### **Secure & Reliable**

Designed with security at its heart employing a wide range of security measures, such as cyclic keys, replay attack protection and prevention against man-in-themiddle attacks. The security is considered at all levels of the system and takes a through life approach to security.

### **BEDROOMS** KITCHENS LIVING AREAS **CORRIDORS** CIRCULATION AREAS **EXTERIOR** LIGHTING UNDFRGROUND **CARPARKS**

**BATHROOMS** 

### **DID YOU KNOW?**

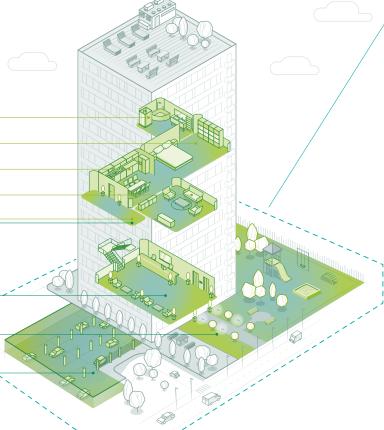
### 41%<sup>1</sup>

energy cost increase in EU households.

of the total electricity consumed in a residential building is attributable to lighting. Second only to space and water heating.

of energy consumed by traditional lighting can be reduced through the use of Smart lighting control.





Building wide

### SylSmart Energy

Powering your drive to net zero. SylSmart Energy is an advanced energy analytics platform that empowers facilities managers and homeowners to take action regarding their carbon emissions and energy consumption.

### **In-depth analytics**

Users can monitor detailed energy consumption throughout their home or building

### Formulate action plans

Create budgets and energy reduction strategies in order to meet your reduction targets and maximise savings.

### Single pane of view

Monitor gas and electricity consumption and solar power generation across multiple sites from one platform.

### **Comprehensive Connectivity**

Gather data automatically from your utility company or push data to other systems such as BMS via API.

#### A new generation of connected lighting

Intelligent lighting systems makes significant contributions to the eco-performance of residential buildings and introducing flexible solutions can deliver the desired functionality and aesthetics whilst also providing enhanced energy efficiency and cost savings. With its wireless technology, sensors, and distributed intelligence, Smart Lighting is the backbone of the digital infrastructure of buildings. The ability to tailor your lighting to the needs of the individual by setting scenes, sensing occupancy, and utilising natural light levels, combined with cutting-edge wireless Bluetooth mesh networking technology, enables SylSmart luminaires to deliver an optimum lighting experience.



### **Lighting standards & regulations:**

### the essentials at a glance

Achieving more sustainable land use by increasing urban density can have a negative effect on the levels of daylight available inside some types of residential buildings. As urban developments become closer together, they can obstruct the availability of daylight and increase the importance of high quality artificial lighting.

The Buildings Performance Institute Europe (BPIE) highlights that the EU has set itself the goal of improving energy efficiency by 32.5% by 2030\* and summarises a combination of EU legislation that covers energy policies, circular economy action plans, and energy product directives designed to help achieve this.

### Meeting the challenge

The biggest challenge facing lighting designers is creating an environment where artificial lighting and lighting controls can seamlessly integrate with natural light and the surrounding architecture to provide comfortable spaces where occupants can work, rest, and play effectively.

In the UK, Part L building regulations issued by the Secretary of State outline

specific measures for the conservation of fuel and power. Lighting plays a central role in making buildings energy efficient and therefore efficient lighting is a requirement and compliance with this regulation is mandatory when upgrading or developing residential buildings. These standards and regulations seek to help identify the right lighting solutions for residential settings that safeguard the health of occupants and protect the

sustainability of buildings and their surroundings. As is normal with government guidance, updates are issued regularly and Sylvania is committed to supporting you through your lighting projects by answering any questions and providing up-to-date and accurate information related to accepted standards, required labelling and any other key points to ensure continued compliance.

### Adequate and appropriate lighting in residential buildings

The Committee for European Standardisation (CEN) has become the standard for lighting regulation across Europe, and in the UK, the British Standards Institution (BSI) uses CEN recommendations when implementing standards for the UK market. BSI has published the updated BS EN15193-1:2017+A1:2021, which defines the common standards for evaluating the energy performance of lighting systems in providing general illumination in new and refurbished residential and non-residential buildings. Communal residential buildings are normally classified as non-domestic under building regulations, hence Approved

Document Part L2A (new buildings) or Part L2B (existing buildings) will apply. These refer to the non-domestic Building Services Compliance Guide 2013 edition which introduces the Lighting Energy Numeric Indicator (LENI) as an alternative means of demonstrating the compliance of lighting systems. This allows compliance to be demonstrated either by meeting the recommended minimum standards for efficacy and building controls or by meeting the recommended minimum standards for LENI. This change was made in response to lobbying by the UK lighting industry to align lighting design with European standards and to give designers greater

flexibility.

The Lighting Energy Numeric Indicator was originally defined by BS EN 15193:2007, Energy performance of buildings. However, the calculation methodology set out in the Non-domestic Building Services Compliance Guide is a simplified version.

LENI is an indicator of the efficiency of an entire lighting installation, including the controls, and is expressed in terms of energy per square metre per year (kWh/m2/yr). The calculated LENI must not exceed the prescribed limit for a given illuminance and the number of hours per year the lighting will be required, as set out in the table from the compliance guide highlighted on the next page.



LIGHTING OF RESIDENTIAL AREAS

Recommended maximum LENI (kWh per square metre per year) in new and existing buildings											
	Hours					Illumina	Illuminance (lux)				
Total	Day	Night	50	100	150	200	300	500	750	1000	
1000	821	179	0.69	0.68	2.57	3.0	3.96	5.93	8.83	12.59	
1500	1277	223	1.04	0.98	3.05	3.68	5.10	8.00	12.33	17.98	
2000	1726	274	1.39	1.28	3.54	4.37	6.26	10.10	15.85	23.40	
2500	2164	336	1.73	1.60	4.04	5.07	7.43	12.23	19.41	28.85	
3000	2585	415	2.08	1.93	4.56	5.81	8.64	14.41	23.04	34.36	
3700	3133	567	2.56	2.42	5.34	6.90	10.42	17.59	28.27	42.22	
4400	3621	779	3.05	2.97	6.20	8.08	12.33	20.95	33.73	50.27	
5400	4184	1216	3.74	3.87	7.58	9.98	15.32	26.16	42.02	62.24	
6400	4547	1853	4.44	4.94	9.22	12.19	18.73	31.99	51.06	74.87	
8760	4380	4380	6.07	8.36	14.33	18.99	28.89	48.85	76.21	108.14	

## The control of lighting and energy-efficiency

In any room where lighting controls have been installed, it is the responsibility of the management staff, even during periods of occupancy, to ensure there is the capability for switching on and off the lighting to reduce wasted energy. The automated control of luminaires is an invaluable help, allowing artificial lighting to synchronise with the level of daylight and dim or switch off as levels of natural lighting dictate it is not needed, or when the room is unoccupied.

### Sylvania's commitment

Our products are 100% compliant with EU and UK standards and many are manufactured in France, Germany, and the UK in accordance with European standards to safeguard quality. Most of our products comply with the EN 12464-1:2021 standards and meet the required specifications set out, including glare (UGR<19), the level of luminance (L65 < 3000 cd/m²), CRI (80 min.) or low flickering (<5%).

<sup>\*</sup> A guidebook to European building policy – key legislation and initiatives: The Buildings Performance Institute Europe (2020)



### **Living Areas**

Lounges and living rooms are the settings for activities ranging from watching television to hosting parties and lighting has a profound effect on creating the desired look and atmosphere. It must serve a functional need, but it also accentuates furniture and décor, bringing the room to life as a central decorative feature.

Layers of light allow the transition between bright and low-level lighting to align with the room's different uses. Using a combination of downlights, LED strips and ambient lights will create ideal conditions for a relaxed atmosphere when entertaining guests at home.

Strategically placed task lighting is perfect for reading, whilst spotlights can be used to generate accent lighting.





Modular design



Easy and quick mounting



Wide range of housing options to get the ambience you wish

### **ISSUES**

### **Comforting and relaxing**

living areas can be achieved with creative lighting designs that provide an informal and comfortable space for people to meet and socialise.

### A flexible lighting solution

incorporating dimming switches and different light sources allows for different lighting to suit the needs of spaces with such varied usage.

### **Maximising natural light**

in designing lighting in living areas will contribute to feelings of good health and wellbeing.

### OTHER LUMINAIRES



### START Spot IP65 Fire

### All-in-one fire rated downlight

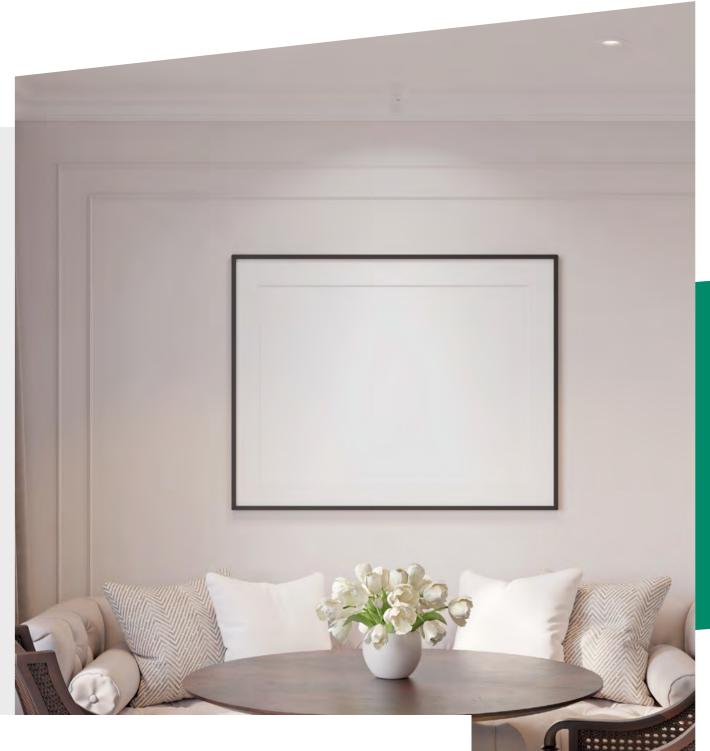
- + Adjustable colour temperature, even after installation
- + Designed and tested to meet Fire Rating Standards
- + Multiple bazel colours: Brushed Nickel, Chrome, White, Brushed Brass, Matt Black bezel



### Pixo

#### Track spotlights

- + Extremely precise light beams due to the high-quality lenses
- + Easily replaceable lens system
- + High colour rendering index, CRI>90





### START Flex LED strips

- + Uniform colour & excellent light quality
- + RGB and RGBW versions + With drivers and aluminium profiles



### Domino

- Modular ambient light
  + High-definition optics
  + High visual comfort
  + Discreet design which blends into the ceiling



Bedrooms can sometimes be an individual's only private space and the room they spent the most time in. Apart from sleeping, bedrooms can be used for studying, working, relaxing, reading, or many other activities and careful consideration must be given to the variety and amount of lighting installed. Lighting needs to be bright on cold winter mornings, but ambient and atmospheric in the evenings. Pendant and ambient lights are a popular feature to create a cosy and stylish atmosphere in the bedroom, while downlights and LED strips are a great way to illuminate wardrobes and walk in closets.

### **ISSUES**

## Managing bedroom lighting properly

will help you transition through both ends of the day with appropriate levels of light to maintain a balanced circadian rhythm.

### **Varied light sources**

will cater to the different activities undertaken in the room and bright decorative themes will help give a feeling of space.

### Layer different types of lighting

to reflect your personal style and personality and use different colour temperatures or dimming switches to control light levels.





Classic design, contemporary technology



Different finishes and reflectors



CRI > 90



Pendant and surface mounted versions available

### OTHER LUMINAIRES



#### Ludospot Modular accent downlights

### + Modular design

- + Easy and quick mounting
- + Wide range of housing options to get the ambience you wish



#### START Flex LED strips

- + Uniform colour & excellent light quality
- + RGB and RGBW versions
- + With drivers and aluminium profiles





### **Concord Domino** Modular and flexible ambient light

- + High-definition optics
- + High visual comfort
- + Consistent colour rendering
- + Discreet design which blends into the ceiling



### SylFire GU10 Fire rated recessed spotlights

- + Fixed and adjustable beam
- + IP65 and IP20 rated models available
- + Twist & lock bezel allows easy installation and replacement access + Replaceable GU10 LED lamps



A healthy, balanced diet can contribute to strong concentration levels, ensuring productivity remains at desired levels. Kitchens are often the hub of a home and creating a pleasant space that is functional and safe space is essential to enable you to prepare delicious and cook wonderful meals. In shared residential environments, canteens, restaurants, and dining rooms are often busy areas, so lighting needs to provide enough light for the high volume of people. Luminaires need to reflect the different uses of space, with recessed downlights delivering uniform illumination and larger pendants creating a relaxed atmosphere.

### **ISSUES**

### **Comforting and relaxing**

dining areas can be achieved with creative lighting designs that provide an informal and comfortable space for people to meet and socialise over

### A functional lighting solution

is needed in food preparation areas where hygiene standards must be maintained and where it's necessary to ensure a safe working environment.

### Flexible lighting

with dimming capability and carefully positioned fixtures will compliment natural light and maximise the functionality of your kitchen.





Built with high-quality, durable materials



Easy-to-install



Adjustable cable



Available in single and triple pendant options

### **OTHER LUMINAIRES**





### Pixo

### **Track Spotlights**

- + Extremely precise light beams due to the high-quality lenses
- + Easily replaceable lens system
- + High colour rendering index, CRI>90

#### **START Spot Fire IP65**

### All-In-One Fire Rated Downlight

- + Adjustable colour temperature, even after installation
- + Designed and tested to meet Fire Rating Standards
- + Multiple bazel colours: Brushed Nickel, Chrome, White, Brushed Brass, Matt Black bezel





### START Flex **LED** strips

- + Uniform colour & excellent light quality
- + RGB and RGBW versions
- + With drivers and aluminium profiles available on the market



### **Myriad Pendant Decorative pendant luminaires**

- + High colour rendering index, CRI90
- + Available for Surface or Recessed installation
- + Variety of colour temperatures+ Choice of Silver, Black or White colour



Bathrooms and sanitary areas need lighting to provide a combination of functionality, efficiency, and comfort. Carefully selected luminaires can introduce a decorative element to an area to bring warmth, creating a bright and pleasant environment that minimises the glare from reflective surfaces.



#### **ISSUES**

### **Task lighting**

such as spotlights or mirror lighting delivers the bright light needed for some beauty procedures where precision is key.

### **Energy savings**

can be achieved with occupancy sensors in shared facilities, which can be set so lighting operation reflects the irregular use of sanitary areas.

### **Quick and easy**

mounting allows easy installation and minimises disruption during routine maintenance in communal bathrooms.



Suitable for a range of applications



Ideal for low level orientation lighting



High colour rendering index, CRI90



Variety of bezels and reflector finishes

### OTHER LUMINAIRES



### START Spot IP65 Integrated LED accent downlight

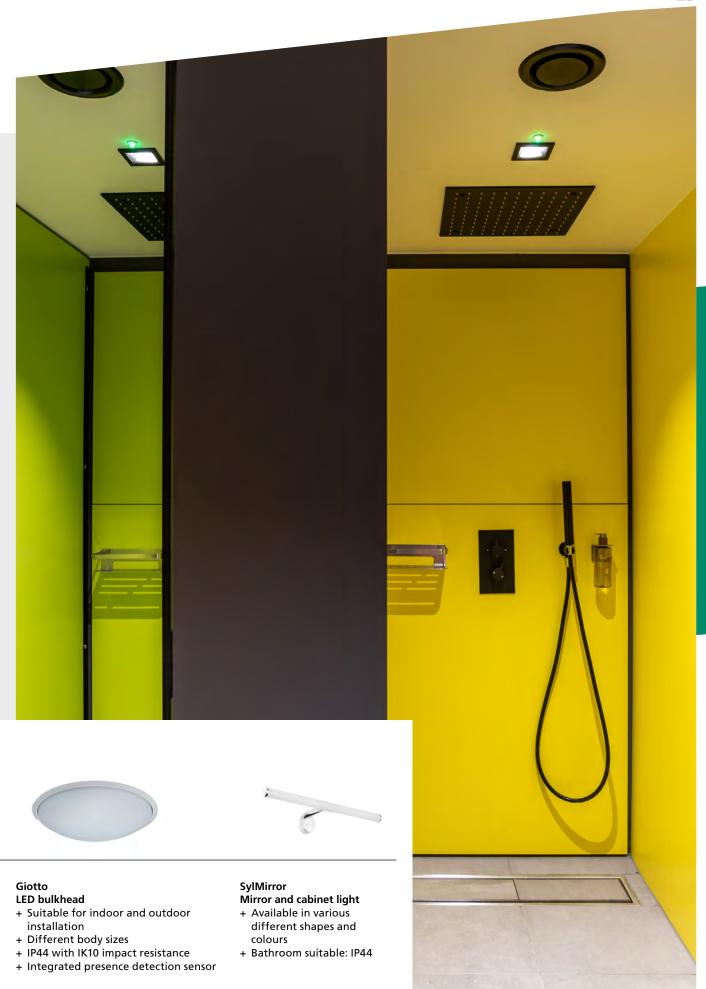
- + High lumen efficacy
- + IP65 version fixed with frosted lens
- + Non dimmable and dimmable options
- + High colour rendering index, CRI>80
- + Large beam angle of up to 110°



#### Obico IP65

### Adjustable recessed spotlight

- + High lumen efficacy
- + Quick and simple installation
- + 360° adjustability
- + Suitable for shallow ceiling voids





### **Corridors & Stairways**

Lighting needs to perform different functions when used to help people move around in a residential setting. There is often no natural light in corridors and stairways, so the lighting must provide good visibility to allow people to travel around safely whilst retaining synergy with the aesthetics of the environment.



#### **ISSUES**

### Safety

in high-traffic areas such as corridors and stairways are important and the right lighting provides good visibility to ensure people circulate safely.

### **Cost savings**

can be achieved by utilising motion sensors to detect movement and only turning on lighting when it's needed.

### **Energy efficiency**

is a consideration in corridors and stairways, as fixtures can be hard to access, and lighting must be functional and long-lasting to minimise maintenance costs.



Designed for small apertures



LumiNature Tunable White Human Centric Lighting (HCL) enabled



**SylSmart Standalone option** 



IP65 protection for wet and humid areas

### OTHER LUMINAIRES





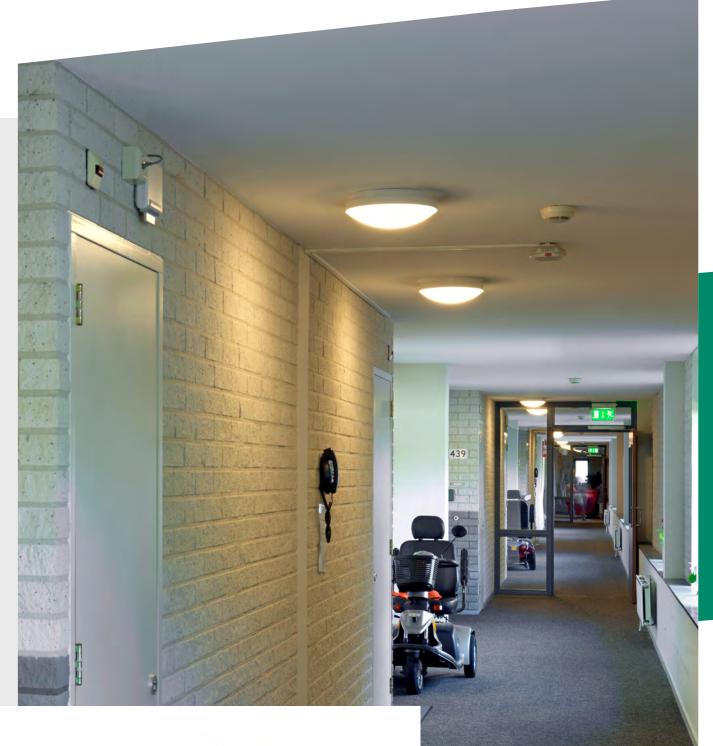
### Concord Colossal Ambient fixture

- + Minimalist luminaire with slender body
- + Soft, homogenous, glare-free and uniform illumination
- + Various dimensions, light distributions, mounting options and colour temperatures

#### Giotto

### LED bulkhead

- + Suitable for indoor and outdoor installation
- + Different body sizes
- + IP44 with IK10 impact resistance
- + Integrated presence detection sensor





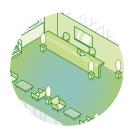
### Insaver Slim Small sized downlight

- + Glare control
- + Excellent visual comfort up to 2500lm
- + High efficacy + Several output options from 620lm to 5200lm from 620lm to 5200lm



### START Emergency

- Surface mounted exit sign
  + Double sided emergency exit signage
- + 3-hour emergency as standard + Surface mounted or suspended options available



### **Circulation Areas**

Areas where people congregate require flexible lighting that provides good visibility and consistent colour rendering to create a pleasant environment across several areas in residential developments. Sufficient illumination is needed to allow people to move around safely, with luminaires located on the ceiling or walls to spread light and reduce shadowing.



### **ISSUES**

### Visual comfort

between people near one another over prolonged periods can cause visual fatigue, so a mixture of focused and ambient lighting with dimming capability will create the perfect conditions for comfortable interactions.

### **Personalised lighting**

in specific areas can be achieved using different luminaires suited to varying needs, such as focused lighting for individual tasks or ambient lighting for group discussions.

### Identification and orientation

in circulation areas such as corridors and entrances benefit from bright lighting with a mixture of independent luminaires carefully positioned to keep open spaces well lit often the best solution.



Minimalist luminaire with slender body



Soft, homogenous, glare-free and uniform illumination



Various dimensions, light distributions, mounting options and colour temperatures

### OTHER LUMINAIRES





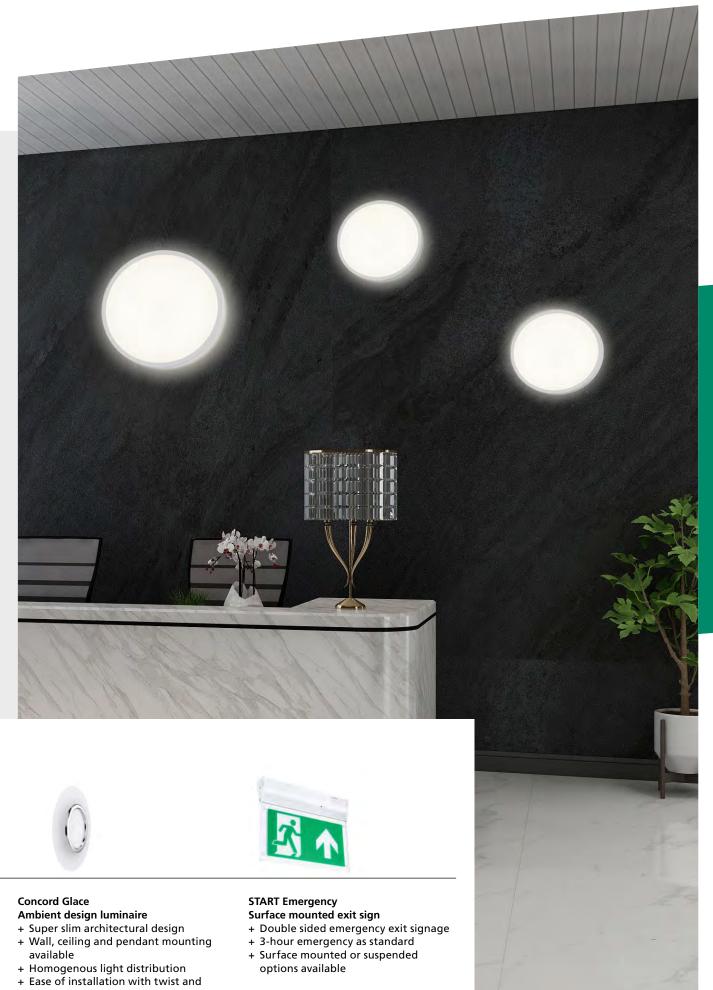
### Concord TubiXx Pendant and ceiling lights

- + Classic design, contemporary technology
- + Different finishes and reflectors
- + CRI > 90
- + Pendant and surface mounted versions available

### Myriad Pendant

### **Decorative pendant luminaires**

- + High colour rendering index, CRI90
- + Available for Surface or Recessed installation
- + Variety of colour temperatures
- + Choice of Silver, Black or White colour



lock fixing mechanism



### **Underground Carparks**

Often located below buildings with no or limited natural light, providing adequate lighting in covered parking areas is vital in ensuring vehicles and people can move around safely. Furthermore, it must be suited to continual operation at all times of day and night and perform to expected levels in extreme ranges of temperature.



#### **ISSUES**

### **Increased energy savings**

are available by controlling the light levels to ensure optimal illumination to suit occupancy and avoid lights being left on constantly.

## A solid and robust lighting system

resistant to high temperatures, dust and moisture is essential to ensure reliable operation.

### **Safety**

of all traffic is always a major consideration, emphasising the need to have consistent, bright, and reliable lighting throughout any covered parking areas.



High luminous efficiency



Easy and quick installation



SylSmart enabled versions



Extreme dust, water and impact protection (IP66/IK08)

### OTHER LUMINAIRES





### Resisto SSA

### Next generation waterproof lighting

- + Robust & durable
- + Ease of installation
- + High efficacy
- + SylSmart Connected enabled versions

### WayLine Efficient Batten

- + Easy to install
- + Very efficient
- Integrated microwave sensor (presence detection)







### Twinspot

- Emergency LED luminaire + 3 h emergency operation
- + Dust and water protection (IP65/IK03)
- + Two individually adjustable heads

### START Surface IP66 Robust design & perfect function

- + High efficacy
- + Extreme impact resistance (IK10)
- + Vandal resistant
- + Standard, Standalone Sensor DIM or **DALI** versions



### **Exterior Lighting**

The exterior lighting needs in residential environments are wide and varied and must provide a safe environment for everyone by delivering appropriate levels of illumination. Preventing vandalism and trespassing is imperative, with localised low level lighting a better option than general floodlighting to avoid creating areas of shadow where light cannot reach from above.

Outdoor lighting impacts how safe people feel in and around buildings at night and can be instrumental in illuminating the large areas of open space sometimes found around residential sites. Paths, building entrances, recreational areas, and car parks all need to be suitably illuminated to reduce the risks of accidents and act as a deterrent against crime.





Switchable integrated photocell



Good ingress and impact Protection (IP65 and IK10)



Multipower solution -5 lumen options available from 1700 to 3250lm

### **ISSUES**

### Sensitivity

to neighbouring areas and minimising light pollution are major considerations when designing exterior lighting and safeguarding compliance with various regulations.

### Resistance to changing climatic conditions

must be guaranteed to ensure external lighting installations maintain optimal performance in all weather conditions.

### Integration

with surrounding areas will allow outdoor lighting to enhance existing environments and accentuate architectural features.

### OTHER LUMINAIRES



### START Bollard IP65 Landscape lighting

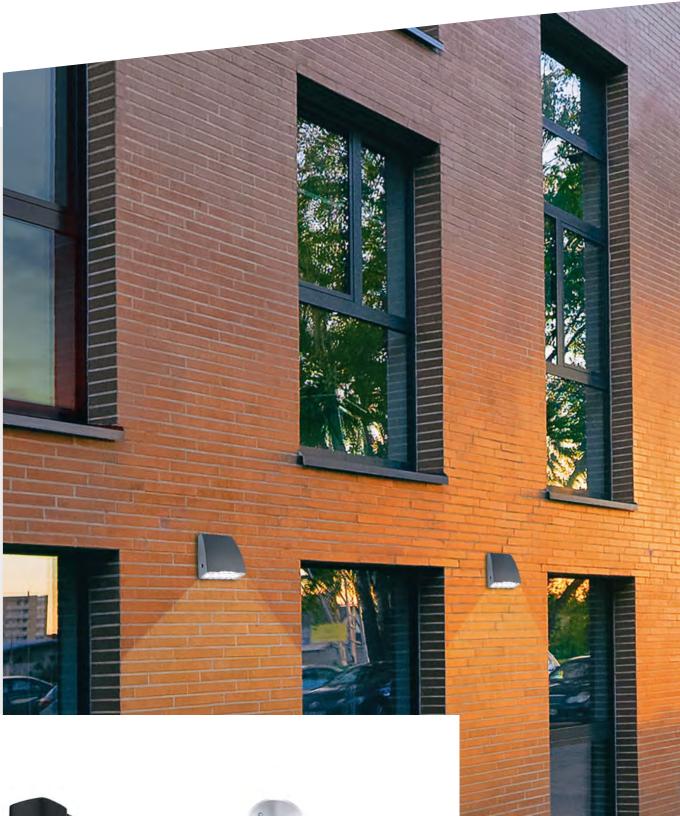
- + Contemporary and robust design
- + High-performance
- + Ideal for gardens and paths



### **Concord Raiden**

### Versatile Floodlight with unique design

- + 4 sizes and 7 lumen packages
- + High performance and efficacy
- + Energy efficient
- + DALI dimmable





### Inverto Surface, wall and ceiling

- + Robust and compact
- + Contemporary cubic design + Corrosion resistant



### Interrata

- Buried Uplights

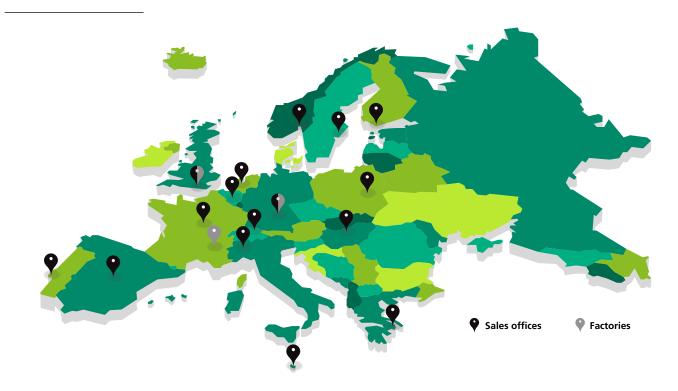
  + Robust design for in-ground lighting

  + Driver over capability up to 2000kg

  + Tiltable for fine tuning

### Local services and support

With nearly 100 years of expertise in designing manufacturing and installing luminaires and lamps, Sylvania has an extensive offering for the public, private and commercial sectors. When selecting a product from Sylvania you are selecting quality. Every luminaire is diligently checked prior to leaving our facilities for your peace of mind. Sylvania is not only a manufacturer but a partner and complete solution provider to our customers. We have a holistic range of services at your disposal encompassing the full lighting project life cycle. Allow yourself complete serenity with Sylvania's expertise and be assured that all your lighting projects benefit from perfectly mastered solutions.



#### Made In Europe

We take pride in having local Research and Development and production facilities throughout Europe. Our factories and production units are located in France, England and Germany. Our Research and Development offices are a leading part of our organisation and allow us to be at the forefront of technological innovations, and to be constantly on the lookout for new developments, whether it be emerging uses by occupants, environmental challenges, or compliance with new regulatory standards.

This company structure is a guarantee of quality, and a reflection of our strong social, work-policy and environmental commitments. On this point, the manufacturing process and the European design approach significantly reduce the carbon footprint of our products.

### Local and custom-made services and support

With local sales offices throughout Europe and a mission to support our customers with our local expertise, Sylvania has crafted bespoke solutions and services tailored to our clients' individual requirements. Adapting to the intricacies of any project, we can assist you from project concept to installation and provide ongoing support to ensure you have complete serenity and can focus on your business and let us take care of the details.



# **Custom-made 360 Services for complete peace of mind**

Implementing a package of holistic services that balances the best financial interests of clients with the achievement of sustainability objectives which helps businesses deliver energy and cost-efficient projects is a delicate task. It requires deep understanding, careful and precise attention whilst reducing the barriers and disruptions to adoption. Sylvania's 360 Services help customers save energy, decarbonise, de-risk their investment and project timelines, minimise disruption, ensure access to key financial schemes, and help protect their capital with turnkey solutions for all phases of their project that safeguard successful project execution and ensure the client's needs are met.









### Assess - Consultancy | Audit | Lighting Design | Prototype

Helping customers identify and understand potential pain points and developing tailored products and solutions and value-added services that build resilience and ensure compliance.

#### Manage - Project Management | Goods Handling and Storage

Delivering the enablers needed for complete project success and taking responsibility for ensuring appropriate processes and functions are in place to deliver a precisely crafted, well optimized solution to meet the customer's ROI objectives.

### Implement - Installation | Commissioning

Resourcing projects to implement customisation and operational efficiencies with minimal disruption to ensure the delivery of the project on-time, to budget, and to the highest standards.

### Aftercare - Software Support | Warranty | Training | Maintenance

A partnership with Sylvania is for life. Documentation, education, and handover of a project is just the start. Ongoing maintenance and local support are key to building long-term partnerships and to offer protection for future compliance and continuing efficiency plans.









Although every effort has been made to ensure accuracy in the compilation of the technical detail within this publication, specifications and performance data are constantly changing. Current details should therefore be checked with Feilo Sylvania International Group Kft. Copyright Feilo Sylvania International Group Kft. Sept 2022

A Feilo Sylvania Company

