

VITRULUX

# We Create Worlds of Light

Overview

Personal initiative and passion  
for our work are the main  
values of our company.  
After all, everything we  
do is imbued with a  
passionate love  
for the  
light

[vitrulux.com](http://vitrulux.com)

Vitrulux — Glass and Light

**VITRULUX**

# VITROLUX

Vitrolux offers exclusive lighting solutions of any degree of complexity.

Vitrolux was founded in 2004 in Espoo, Finland, when the first Russian architectural and artistic lighting project using LEDs was realized for the Langenzipen Business Center in St. Petersburg by order of the European architectural bureau Tchoban Voss. Enriched by the Western experience of lighting solutions, Vitrolux has managed to find its own style, a unique approach based on its innovative developments. This allowed the company to achieve an absolute leadership in the current domestic market in the area of design and manufacture of lighting products for various purposes. Since the establishment of the company, over two hundred large-scale projects have been implemented, and the entire company's portfolio includes over three thousand projects.

Vitrolux provides unique and environmentally friendly light solutions for interiors and structures of any complexity: from the production of garden lights to macro projects, such as the lighting of cultural buildings, highways, and creating intelligent systems. We offer elegant customized solutions based on our in-house lighting technology.



## Mission of the Company

We develop technologies and create projects that define spaces for living. We want to transform habitats into smart cities of the future, where a high quality of human life is inseparable from the well-being of the planet.

**Our goal** is to achieve a perfect combination of customer desires, aesthetics, and optimal technical solutions in every project.

**Our concept** is the combination of high technology, perfect design and environmental friendliness in everything we do.

Vitrolux is, first and foremost, a team of the best specialists: planners, engineers, and designers, as well as a powerful production facility with the state-of-the-art equipment, scientific laboratories, and a training centre. We use our own patented technologies that ensure the best technical characteristics of our products in the market. We analyse progressive global trends and engineering innovations and offer not only the leading-edge, but also forward-looking solutions. We fully comply with the standards for indoor and outdoor lighting and ensure strict control over the technological process at every stage, which allows us to guarantee the quality of our products and their operational reliability.

We care about the future of the planet, so the basic principle of the company is a sustainable balance and restoration of the biosphere. We use LED technology, which reduces energy consumption by half, we do not use mercury and our products do not need special disposal.

We are committed to a position of respect and sensitive attitude to people's personal space: our lighting does not intrude into residential buildings, it does not impair the visibility of the night sky or disrupt the biological cycles of urban flora; our lighting also increases traffic safety.

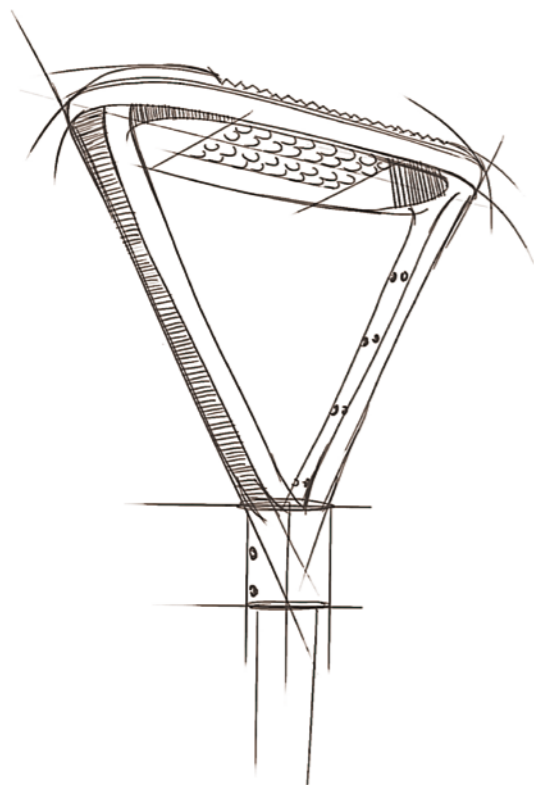


For more information please, visit our site

[Vitrolux.com](http://Vitrolux.com)



# Create Light



## DELTA

The extraordinary lightness and engineering elegance of the luminaire's optical module mounting system creates geometrical completeness and integrity of the entire design. The optical module is oval in shape and looks light and modern. An advanced LED module creates circular lighting around the support.



## PARALLEL

Two planes in space, what can be simpler when we talk about design of strict lines and shapes? In the facade luminaire, the linear rectangular casing of the optical module and the square base of the wall mount form a sense of completeness in perception of this model.



## FOCUS-LC-8-180/5

The luminaire is available with an external RGBW power unit for LED-sources and a 4-channel DMX controller. Using the lighting equipment in exterior lighting design of buildings and structures, we highlight its architectural and distinct style features.



## AUDIO PRO

Designers and engineers of Vitrulux present COLUMN AUDIO – Light & Sound Engine combined bollard, including acoustic and optical systems installed in the upper part of the bollard and directed downwards. The conical diffuser directs light and sound around the support, gently and comfortably forming a spot of light.

The lighting laboratory has three departments:

Department of Lighting Research  
 Climatic Testing Department  
 Department of Development  
 and Testing of Electrical Products



Main parameters and characteristics monitored in the laboratory:

- ▲ Total luminous flux
- ▲ Chromaticity coordinates
- ▲ Colour coordinates
- ▲ Colour rendering index
- ▲ Correlated color temperature
- ▲ Dominant wavelength
- ▲ Parameters of colour and spectral angular distribution
- ▲ Pulsation coefficient
- ▲ Power
- ▲ Power coefficient
- ▲ Light intensity curve
- ▲ Photosynthetically active radiation
- ▲ Thermal radiation
- ▲ Light energy spectral density

# Laboratory The science

The use of patented technologies, our own research laboratories and the highest qualification of our specialists allow us to achieve the best technical characteristics of our products today. The laboratory is equipped with sophisticated equipment and employs highly qualified specialists, including Candidates of Technical Sciences, which makes it possible to perform the whole range of research and development activities and solve the most complicated problems in the shortest possible time.



Lighting modelling, calculation of illumination, 3D visualization of a project. All lighting solutions using Vitrulux luminaires correspond to the style of architecture and area of application.



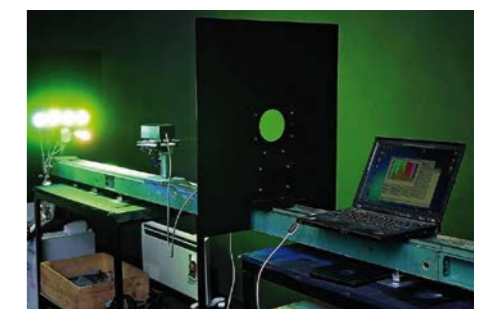
## IN-HOUSE GONIOMETRIC FACILITY

In the laboratory there is a facility for checking luminaire parameters on the basis of an integrating sphere and a static goniometric unit.



## CLIMATIC TESTING DEPARTMENT

It is equipped with a 250-litre "HEAT-COLD-MOISTURE-THERMOCYCLE" climatic chamber that enables to test the entire product range.



## DEPARTMENT OF LIGHTING RESEARCH

The department is equipped with the state-of-the-art equipment and systems for monitoring parameters and characteristics of lighting devices and systems, supporting in-house developments.

# Our services implement your ideas

2 times more  
energy efficient

Up to 40%  
saving resources



# Innovation Technology

We specialize in customized lighting solutions, providing a full range of services. Thanks to many years of experience and professionalism of all our specialists, the company offers most innovative products with high performance and distinct design.

Vitrulux is a modern manufacturing hub, where the well-organized processes of production, quality control and product design are ensured by the solid team of the company.

## The facility includes:

- ▲ Mechanical processing workshop
- ▲ Optical components workshop
- ▲ Paint and coating shop
- ▲ SMD assembly line
- ▲ Department of power electronics development
- ▲ Laboratory



Optical components workshop



Over 50% of the Vitrulux luminaires have unibody casings that are manufactured from primary aluminium by milling and turning. High density, no internal cavities, precision machining, all this allows the creation of lighting equipment with a compact design and the highest efficiency.



No one thinks about it, but often the energy required to produce the body of an LED light fixture exceeds the energy savings from its implementation.



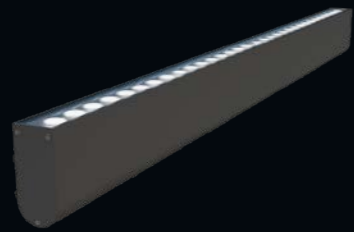
A special multi-layer coating protects the luminaires from the harsh conditions of the city, ensuring their durability over their entire service life.



Our products are equally competitive with Western counterparts, surpassing them in certain parameters; some samples of manufactured products are unparalleled and protected by patents.

# Footbridge

The Yakhtenny Bridge is the longest and highest pedestrian bridge in Saint-Petersburg, which connects the southern shore of the Primorsky District with the northern part of Krestovsky Island. Two futuristic bends in the silhouette of the bridge structure have a radius of more than 250 meters. The observation decks offer a magnificent view of the Gulf of Finland, the passenger port, the Gasprom Arena stadium, and the Lakhta Center skyscraper. Vitrulux manufactured 670 VITRUWALL luminaires and VITRUBOX floodlights to illuminate the spans, supports and the bridge deck itself. A warm white light envelops the bridge from the outside and inside, creating the association of a star trek floating in the dark.



## STRIPE PRO

The facade luminaire has a high light output while maintaining a homogeneous luminous flux, even when put close to the facade wall. The use of efficient secondary optics, integrated power supply units and reliable input cables, ensures implementation of the most complex tasks in light design. The use of luminaires with elliptical optics will evenly illuminate vertical planes with no interfacing shadows.

940  
meters



670  
lamps

The innovative system of adjustment and fixation of the light module allows minimizing the setup process. The high luminous efficiency, including at the output of the optical module, reveals the full potential of the equipment even when approaching the most complex technical tasks. The luminaire has high reliability and stability of the light module fixation in conditions of vibration. Six types of light distribution optics are available for this model.

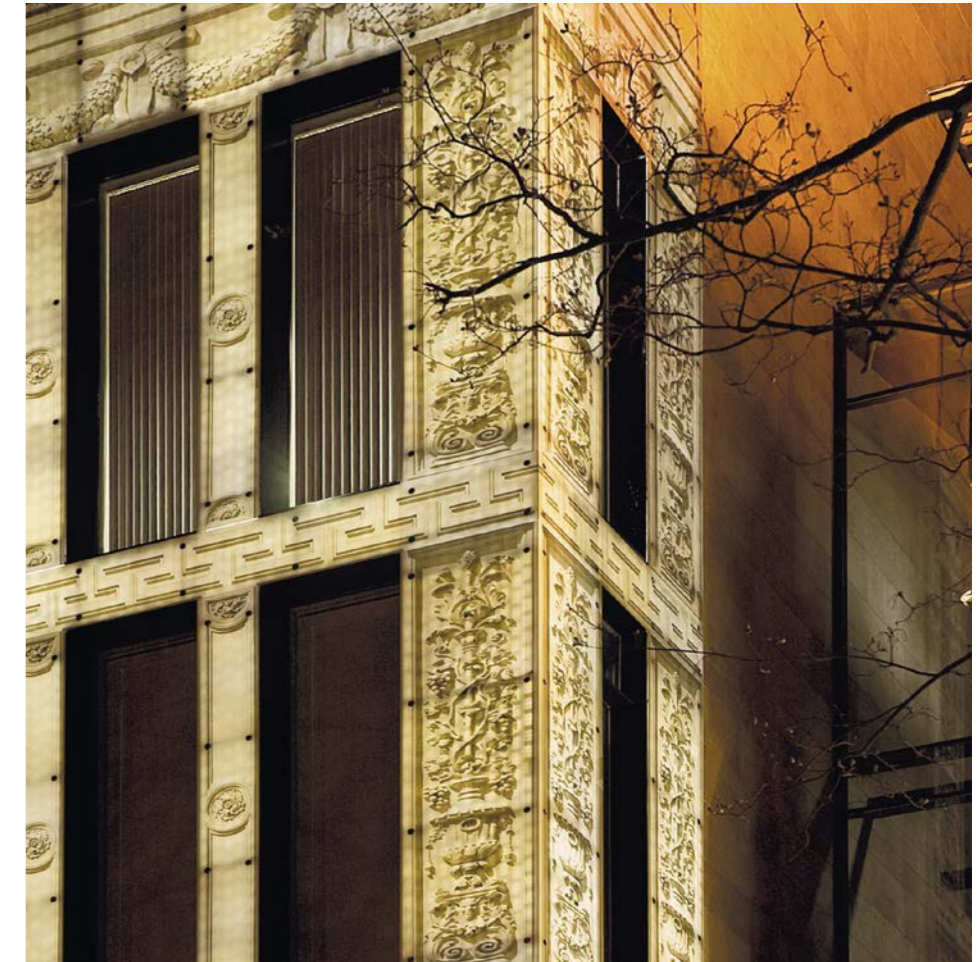


## BRIDGE





Langenzipen Business Centre is a cultural heritage building located in the Petrograd district of Saint-Petersburg, where a large part of the Northern Art Nouveau historical buildings can be seen. The task of the authors of the project was to create an organic blend of the two buildings of the business centre: a late-19th century building and a modern one. Printed glass with images of atlantes and photographic quality stucco mouldings were used for the first time to decorate the main facade of the new building. From afar, the figures appear to be three-dimensional sculptures. The classic motives on the glass make it possible to bridge the past with the modern times. The expressive and delicate lighting of the facade from inside allows this optical illusion to be intensified, and this fantastic effect is continued at dusk or at night. The LED BACKLIGHT PANEL flat luminaires selected for this project have reliably been in use for over eight years.



The glass facades of the buildings are decorated with Greco-Roman ornaments.

Printed glass was used for the first time in Saint-Petersburg to create the main facade of the modern building. There are images of atlantes and high-resolution stucco mouldings on the glass facade panels. From afar, they appear three-dimensional and look sculptural. The total area of glazing is very large, 4,000 square meters. This solution was immediately called "revolutionary." The building is beautiful during the day, and at night it makes a fantastic impression thanks to the inner illumination of the facade.



The ultra-thin LED illumination panel, as a special purpose luminaire, is designed for general lighting. The unique structure of the device is designed for demanding conditions and meets the most stringent requirements. The optical module provides comfortable illumination with a special diffuser material that reliably provides mechanical and impact resistance. Lamp modifications in the 20-40 W range are available.

## New technologies



# 478

lighting fixtures

The Zaryadye Park is a grandiose park in the heart of Moscow that combines the latest achievements in landscape design with organic and relevant recreational architecture. In 2018, Time magazine included Zaryadye, the only Russian site, in its list of the World's Greatest Places. The diversified multi-layered landscape and brilliant engineering and construction solutions are highly evaluated not only by the international expert community, but also by visitors, who note the park's special beauty at night. CAMPANA lighting fixtures of ST series, designed with consideration of all the requirements of the Russian climate, are not only fully consonant with the concept of space, but also create an additional emotional focus. A total of 478 lighting fixtures on 147 supports were produced and installed in the Zaryadye Park.



CAMPANA

# World's Greatest Places\*

\* TIME | Greatest Places 2018



ANGOLO

The vertically bevelled pyramid creates a balanced geometric effect of the luminaire's clear form. The visual integrity is created by the stylized body and the wide light flux dispersed in the space.



ELEGANT

A recessed wall luminaire with an asymmetrical source of light deep in the casing spectacularly projects a luminous flux on the horizontal plane of the floor through monolithic mineral glass. A number of advantages, such as minimum depth of recessed installation, high luminous efficacy at the output of the luminaire, and complete control of glare, contribute to a truly wide range of applications, both in exterior and interior design.



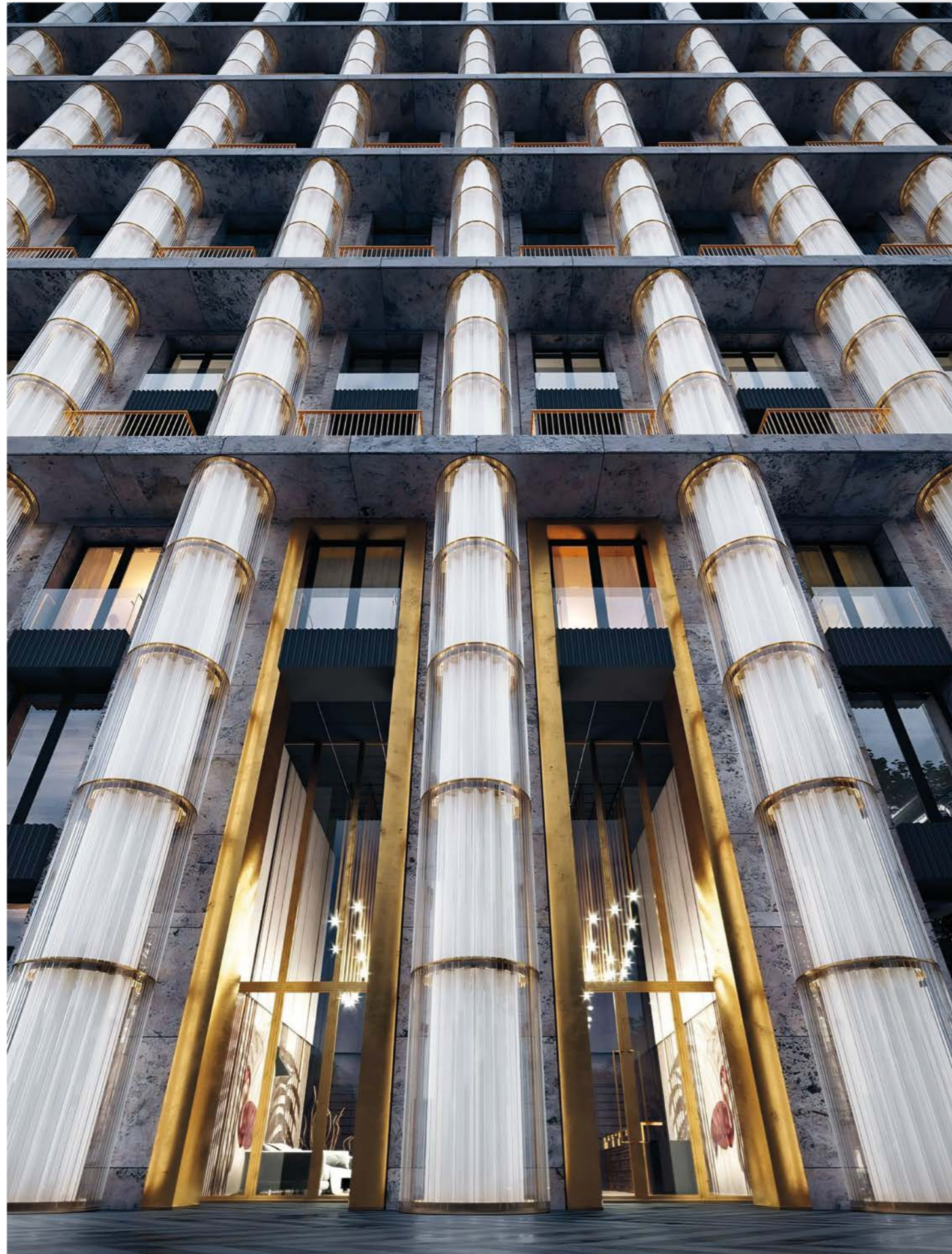
SP-RD-1

Turning to nature, we often think about the application of nature-related forms in the design of light fixtures used in landscape design projects and the geometry of small architectural forms. Decorative lighting conveys a natural resemblance to the glowing reeds or a bush, effectively dominating the environment and focusing the attention of observers to the artistic lighting, thus creating the illusion of inseparability of light and biological forms of the surrounding world.

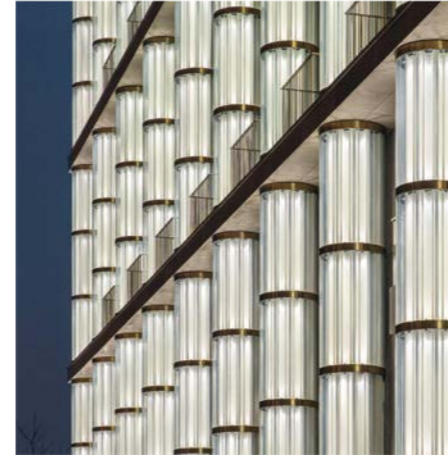
# 147

supports



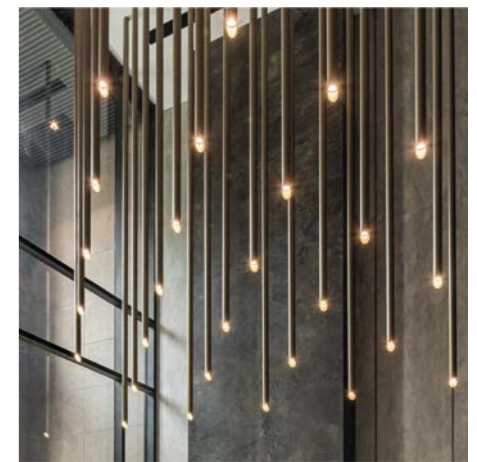


# Perfectionism



The architectural concept of the club house "Kutuzovsky XII" is an allegory of a fantasy forest: the facade is decorated with a unique crystal colonnade, as if composed of fifty-meter high crystal tree trunks glowing from within. The interiors unravel the main motif in wall panels made of stone, marble, glazed tiles and brass, representing the forests of Russia: birch groves of central Russia, Siberian taiga, and the Far East bamboo forest.

Vitrolux participated in the development, production and supply of high-class lighting equipment for exterior, architectural, interior and landscape lighting of the residential complex, and carried out designer supervision of installation. The CUPER SP-TB luminaires, delicate inserts in patinated bronze, which are installed in the 'bamboo' lobby, were also designed and produced by Vitrolux.



CUPER SP-TB

Unique glow.  
Unique light.



SIGNAL SP-PO

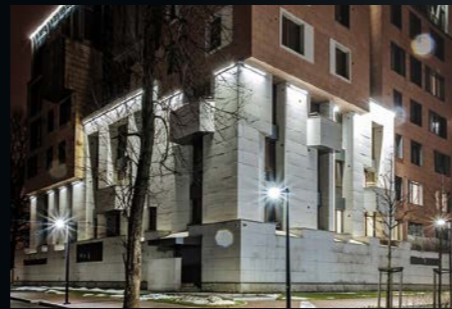
A luminaire specifically designed to create spot lighting with a diffuse effect (the visual effect of the starry sky). The model has small dimensions and small light output of the device. The luminaire can be supplemented with various accessories, such as a shield.



# Style.



Smolny Park residential complex is an example of a modern functional interpretation of areas in the historical center of St. Petersburg. The 13 houses in the neo-constructivist style are semantically oriented towards the Smolny Cathedral, which is the architectural landmark of this part of the city.

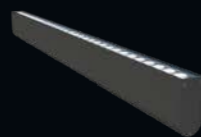


The decorative lighting of the residential complex which consists of two types of lighting fixtures from VITRURING and VITRUWALL series forms a distinctive night image and opens up the geometry of the architectural solution from a new perspective, it is also designed for everyday comfort of the local residents.

VITRUWALL-SM



VITRUWALL STRIPE PRO



FRAMMER



VITRURING TEHO



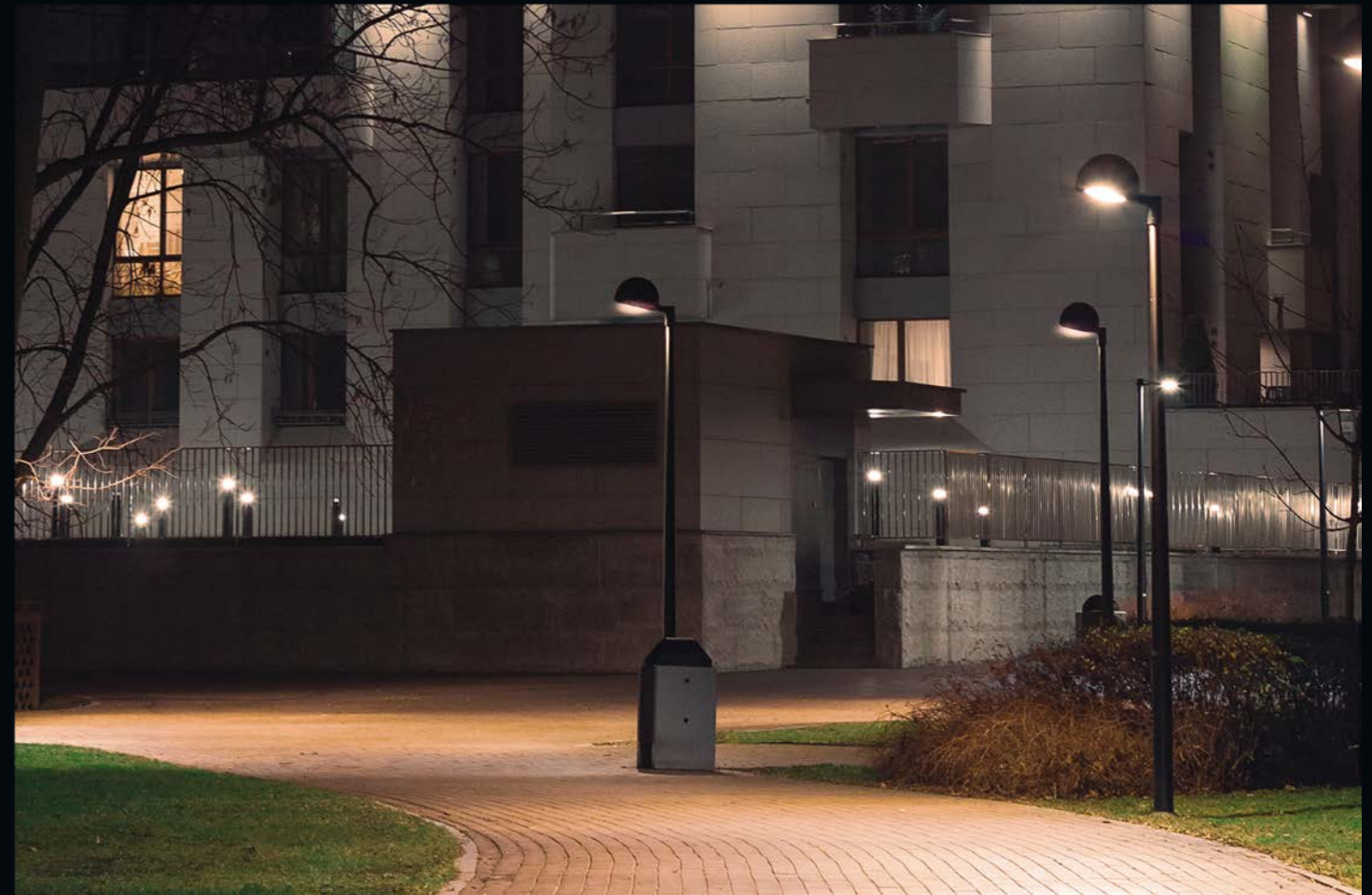
LIGHT CONE



# Comfort.

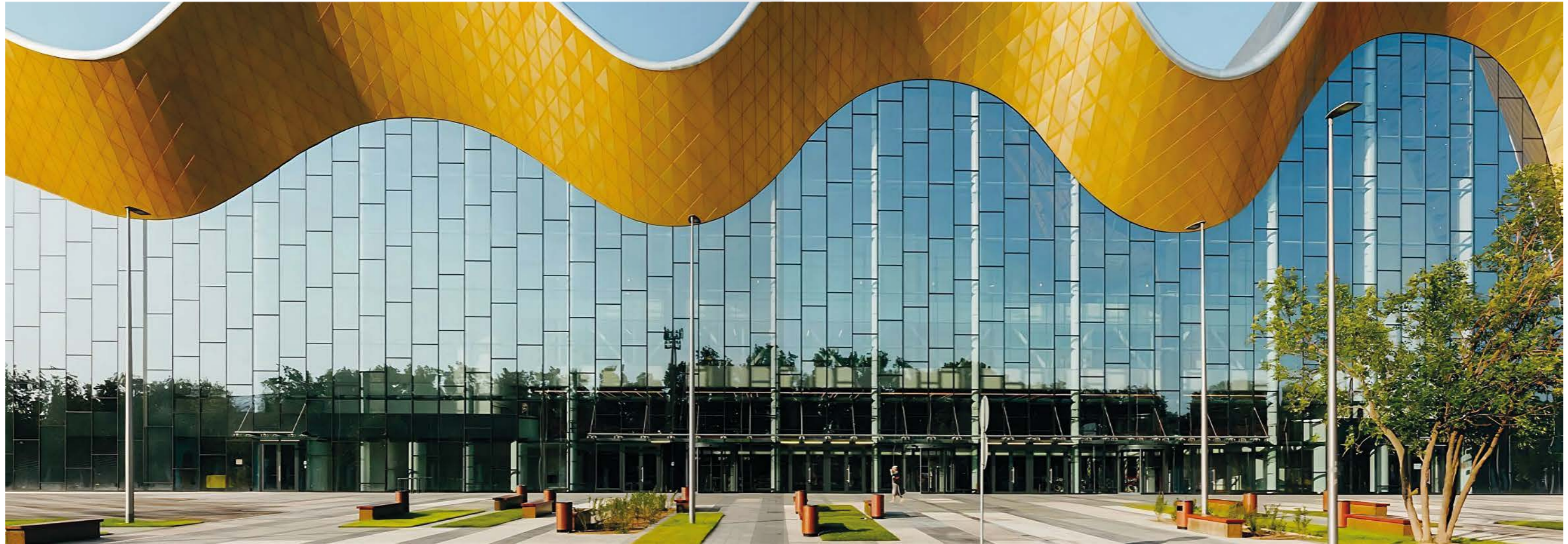


VIBO



# Lighting.





# Gymnastics Palace

A gymnastics ribbon is the symbol of the new Palace of Rhythmic Gymnastics built in Luzhniki, Moscow. Its dynamic contour is embodied in the unusual roof of the building, an architectural and artistic focus of the project. The facade made of glass acts as an almost invisible support, with the golden wave freely sweeping above it. Because of the light pattern, the night image of the palace emphasizes the architectural concept, making it clearly expressed and obvious.

A rich sunshine canvas of LIGHTER MEDIUM luminaires from the FOCUS series. The aesthetic component is complemented by the practical part of the project: street lighting in the area adjacent to the Palace makes it comfortable to attend evening performances or training sessions.



## ENGINE TOP

The family of ultra-thin direct-emission luminaires is designed to illuminate roads of various types, parking lots, and pedestrian areas. The optical module is made with high-performance secondary optics, with reduced glare. The top cover of the luminaire has a stylish radiator for passive cooling of LED sources. The mounting system allows the device to be mounted on the top of the pole.



# Olympic Complex

Moscow Luzhniki is one of the largest sports complexes in the world and the most famous stadium in Russia. The result of its large-scale reconstruction, carried out before the 2018 FIFA World Cup, was not only the transformation of the main arena, but also the improvement of the surrounding areas, including Luzhnetskaya Embankment.

The elaborate lighting system makes it possible to stroll or train here in the evening and at night, as LED lighting fixtures of the ST series create a continuous layer of bright but non-glaring light, enhancing the semantics of the place.

The overall sports concept is expressed through the orientation of the space towards active leisure: bicycle paths are marked out, areas for jogging and rollerblading are created, trees are planted for comfortable walking, and the descent to the water is improved.



PARK PRO RGBW

In the design of landscape lighting, it is most important to arrange lighting of green spaces. FOCUS-TC luminaires were specially designed by the VitruLux engineers as a solution for most demanding tasks. The luminaire features an integrated RGBW LED power supply and a 4-channel DMX controller.



ENGINE FLAT

The family of ultra-thin direct-emission luminaires is designed to illuminate roads of various types, parking lots, and pedestrian areas. The top cover of the device has a stylish radiator for passive cooling of LED sources.



~ 10 000 people  
daily engaged  
in sports.

and not only during the day



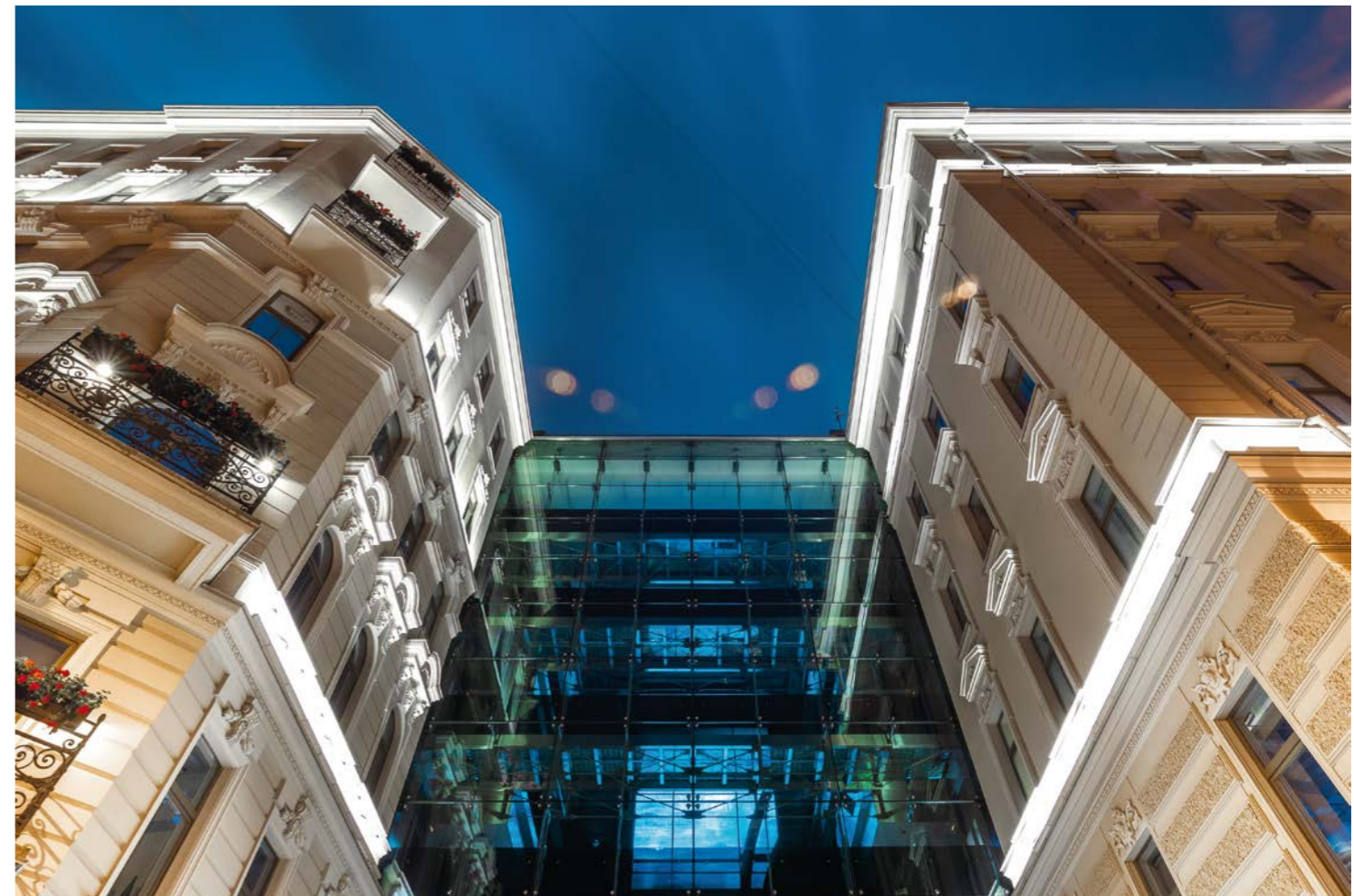
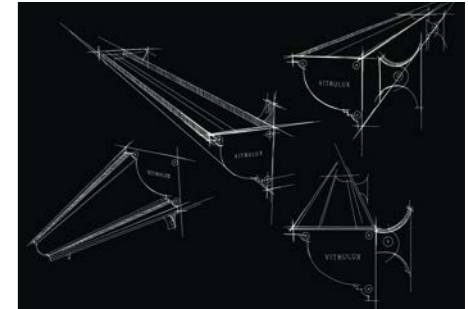
# Classicism

The business centre is located close to all the main sights of Saint-Petersburg. From the windows of the six-storey business centre you can see the Peter and Paul Fortress, the Trinity Bridge, the Summer Garden, St. Isaac's Cathedral, the Admiralty, the Hermitage, and the Spit of Vasilievsky Island. Russian and Italian architects and designers recreated the historical appearance of the former commercial building, combining it with a dynamic approach in the hi-tech style. In this project, green technology was implemented: the building has minimal impact on the environment. The VITRUWALL elliptical luminaires used for facade illumination help to emphasize the smooth architectural lines and decor of the building and create a perfect light pattern, undisturbed by the interfacing shadows.



VITRUWALL CLASSIC

The luminaires have been specifically designed to illuminate the classical architecture of the building. Linear light fixtures with high-power LEDs are designed to be used for facade illumination, including indirect eaves lighting, and floodlighting of buildings and structures, as well as in landscape and architectural design. Linear LED luminaires are characterized by stable operation in a wide range of temperatures in all weather conditions.



# Park of Angels



The memorial Park of Angels is laid out in memory of the victims of the tragedy that happened in 2018 in the "Winter Cherry" shopping centre in Kemerovo. Visually, water became the main element of the area: a waterfall, a system of fountains, and trees as a semantic dominant feature: 60 pine trees according to the number of people killed in the fire. The unusual landscaping solutions – reproduction of different natural zones of Siberia, an elaborate audio background, numerous art objects – have made the park a real landmark in Kemerovo. The park's lighting at night does not only preserve the special mood of the place, but also becomes an important aesthetic element. 310 luminaires of the DECOR COLUMN series are as if redrawing the space, helping to feel striking gratitude for the beauty of this world.



Vitrulux produced 310 luminaires for this park.





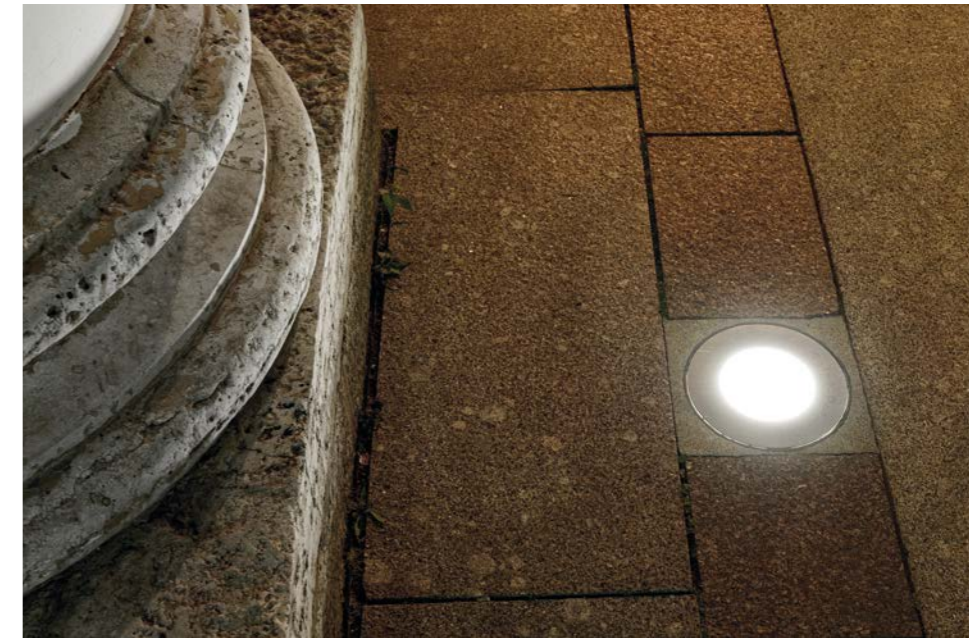
# Palace Square

Palace Square is the main square of Saint-Petersburg, its iconic landmark. It is included in the UNESCO World Heritage List along with other sites of the historic centre. Participation in shaping the night appearance of one of the most significant creations of Russian architecture was a kind of indicator of Vitrulux's reputation. In this project, the elements of modernity are intertwined with the historical context with a special delicacy. The ultra-thin, heavy-duty ground luminaires BESPOKE GROUND, an innovative development of the Vitrulux engineering workshop, which have been used for the illumination of the square, are completely invisible by day, and at night they evoke the association of the shimmering light of Saint-Petersburg lanterns reflected in the Neva River.



## BESPOKE GROUND

A new development of the Vitrulux engineering workshop is the stylish, ultra-thin and highly durable UP-LIGHT ground luminaire. The wide round-shaped fixing frame of the optical module effectively stylizes the exterior of the fixture together with the robust diffusing glass, providing visual comfort and integrity of the exposed surface. The possibility of applying a logo on the surface of the steel ring makes the device exclusive, improving the image of the installation site. The fixture is fully resistant to external aggressive environment, salts and chemical reagents.



## Vitrulux

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Our services implement your ideas



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