





## Merlata Bloom: custom lighting and sustainability for the new Bioclimatic Lifestyle Centre

Thomas Gravanis and Linea Light Group illuminate the new Milan shopping mall where tailored lighting solutions and energy efficiency are combined to create an urban oasis - the perfect place for people to meet up and enjoy themselves

Merlata Bloom is a futuristic architectural wonder destined to revolutionise the Milan's urban skyline. The lifestyle centre, designed by the famous Studio CallisonRTKL, is a tribute to sustainability and everyday life, in line with the highest urban planning standards and poised to become the focus of the city's attention.

With 210 stores promising to dazzle visitors, featuring a unique selection of national and international brands, the Merlata Bloom is distinguished by its organic architecture inspired by the structure of DNA. The architectural complex, featuring two circular buildings connected by a suspension bridge, is a striking example of modern architecture, reflecting the vibrant and dynamic spirit of Milan.

The lighting for Merlata Bloom was designed by the Greek lighting designer, Thomas Gravanis (Studio L+DG Lighting Architects), who was responsible for all the details and care taken over the lighting aspects, fulfilling the visual comfort and sustainability requirements dictated by the project. Thanks to Thomas Gravanis' creative solutions and "tailor-made" luminaires by the Linea Light Group, consistent with the initial briefing provided by CRTKL's team of architects, headed by Jorge Beroiz, the lighting blends harmoniously with its surroundings, creating a welcoming and inviting atmosphere. Despite a number of challenges, such as mitigating light pollution and glare, the result is comfortable, high-quality lighting that accentuates the distinctive architecture of the lifestyle centre.

"The lighting in a shopping mall, as in any store, is fundamental and must contribute to a comprehensive, all-round experience both for the users and from an architectural point of view!" Thomas Gravanis states. "If you stroll around the city centre and look carefully at the lighting in the showrooms, you will see how it enhances the architecture and the layout of the spaces, making them more appealing to customers and encouraging them to stay inside longer. We adopted these same principles for this project, in an attempt to create a welcoming, fluid and inviting environment in which visitors can enjoy a pleasant experience and spend quality time. This is why we adopted different solutions to eliminate the glare of the LED light sources, by using anti-glare accessories and, in some case, designing specific customised anti-glare devices. We also paid extra attention to the quality of the light, ensuring that it was impeccable to avoid visual disturbances and provide pleasant comfortable lighting.

The Merlata Bloom interior showcases magnificent, expansive, seamlessly interconnected spaces distinguished by ample use of glass elements. Spaces as diverse and intricate as these naturally have different lighting requirements, which Studio CRTKL sought to address by aligning with the building's bioclimatic and energy-efficient design principles.

Linea Light Group proved to be the perfect partner for the Merlata Bloom lighting project. The Veneto-based company developed tailored solutions to meet specific requirements. Its ability to produce the solutions in-house, thus ensuring complete control over the entire production process guaranteed the quality and flexibility required to implement this visionary project.

Thomas Gravanis continues by saying, "We wanted something other than standard catalogue products, simply because we wanted to achieve something different. This is why the partnership with Linea Light Group proved so successful. The fact that the Veneto-based company produces everything in-house gave me a significant guarantee in terms of the quality of both the product and service. By producing everything in-house, they have complete control over production which allows them to implement all the changes requested by the designer and check them in real time with mock-ups of the environments and products. For this project alone, a large number of mock-ups or samples were produced with a quick turnaround despite the inherent difficulties".

















The main glass barrel vault roof posed a significant architectural and structural challenge. Skin light fixtures were installed in the signature wooden baffles of the ceiling to achieve a creative solution. The distinctive hexagonal shape facilitates the creation of continuous and structured linear compositions, illuminating the intricate or irregular perimeters of contemporary architecture with its silhouette. Skin – in the downlight version – fits seamlessly into this particular recessed installation, while adding character to the setting. The ceilings of the corridors between the shops were illuminated by custom recessed solutions, aligning clusters of 20 or 5 COB44 downlights (measuring 1.90 metres in length), thus creating an ultra-sleek look with adequate lighting and a three-dimensional quality. On either side of the shop windows, decorative pilasters host Rollip PRO vertical linear light fixtures, measuring 4 and 7 metres long, serving to distinguish and characterise the entrance to each shop.

Similarly, on the first floor, visitors arriving on foot from the Merlata district enter a green space known as the "winter garden", where the lighting scheme is designed to seamlessly blend with the urban landscape, offering users an authentic "open air" experience.

The area is illuminated by 4 different solutions by Linea Light Group, carefully chosen to avoid problems with environmental and lighting pollution. The Warp recessed downlights (in the black and white version) were installed in the upper false ceiling at the entrance to the shops and used to support the Navata Optus projector spotlights, installed to minimise glare, while black Illuminator downlights were inserted in the ceiling along the wooden "ribs". Bond Pro bollards were added to light the greenery in the borders with a colour temperature of 3000K (one of just a few solutions in the entire project not to feature a colour temperature of 3500K). In front of the restrooms, in what would normally be a transit area, installations resembling trees were created under which visitors can relax and take a break. Orma uplight solutions were also installed in these lounge areas at the base of the 'trees' to provide soft lighting, creating an atmosphere of calm and relaxation. The setting was completed by several lightweight Tour circular pendant lights.

For the outdoor lighting of the building, "the initial concept involved the use of colour, namely RGB fixtures, which the transport authorities, however, objected to because the gradual change in colour would have increased the risk of distracting passing drivers and the risk of causing accidents at a very busy transportation artery. The monochrome solution, however, satisfied everyone," the lighting designer assures us before going on to say, "There was also the question of light pollution, a real danger always lurking in the background when dealing with structures featuring large areas of glass like this one. The main concern for our design firm was to comply with the new energy and environmental requirements imposed by the bioclimatic and energy design of the building, both for the indoor and outdoor lighting. Our aim was to have zero impact on the surrounding environment, namely zero light pollution and minimal glare. A request that was all the more important here because of the number of aircraft landing and taking off. In this case, upward lighting would certainly have been distracting in the most delicate stages of the flight".

Merlata Bloom, with its organic architecture, was designed to be eye-catching while still complying with the directives imposed by Milan's city council and the challenges related to the nearby motorways.

The façades have been illuminated to enhance the visual experience, whether viewed up close or from afar, for both pedestrians and motorists travelling on the motorway. The architecture seamlessly integrates advanced technology and sustainability. The main roof is designed to be environmentally friendly, offering ample natural light while avoiding glare or overheating.



The goal was to highlight the dynamic shape of the building through indirect lighting, seamlessly integrated with the surroundings, and to provide a different perception to anyone observing it. As a result, Rubber flexible linear solutions were positioned horizontally to outline the entire perimeter of the building but used vertically on the wall with the sign of the renowned Lombardy supermarket chain overlooking the residential area, to create a dramatic effect.

The result? A striking architectural and vibrant design!

The lighting at Merlata Bloom was designed not just to be functional but also to create an inviting and stimulating experience for visitors. A neutral temperature colour of 3500K was chosen for the entire project (except for a few small areas) in line with the increasingly popular trend in lighting design, especially in countries with a lot of sunlight. A temperature that is neither too warm or too cold: an intermediate, stimulating level. High-quality LED lights make the setting bright and comfortable while reflecting the commitment to energy efficiency and sustainability.

The Merlata Bloom architectural project successfully meets all the current challenges of sustainability with the use of eco-friendly materials and bioclimatic solutions. An 8,500 m2 dome and the use of 4,500 m3 of laminated timber contribute towards reducing the building's environmental impact by absorbing the equivalent of 8 years of CO2 emissions. The volumes of the new buildings were designed to blend in seamlessly with the surroundings by becoming a natural extension. With over 5,000 m2 of indoor and outdoor green space, Merlata Bloom makes a statement as an urban oasis, offering a family-friendly, comfortable space to local residents and visitors alike where they can meet up and socialise.

The Merlata Bloom lifestyle centre heralds the beginning of a new era for Milan, combining sustainability, innovation and wellness in one unique location.







