

LUMINA COLLECTION INSTALLATION, USE & MAINTENANCE INFORMATION FORM



This guide has been prepared to ensure the correct, safe, and long-lasting installation, use, and maintenance of the Lumina Collection, which features semi-translucent Coante surfaces used with backlit LED lighting systems.

Due to its light-transmitting structure, the Lumina Collection is subject to different application, installation, and usage rules compared to standard Coante surfaces.

PRODUCT DESCRIPTION

The Lumina Collection consists of decorative surfaces that, thanks to their special crystallization structure, reflect light evenly across the surface when backlit.

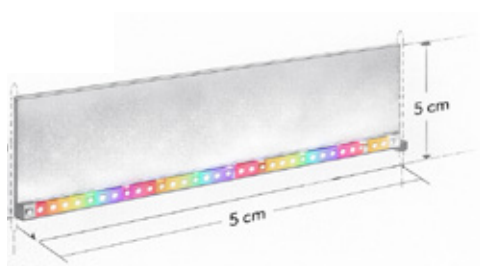
Areas of Use:

- Wall panels
- Counters and reception desks
- Bar and display back panels
- Hotels, spas, showrooms, and commercial spaces

The Lumina Collection is not designed for use as active kitchen countertops or for surfaces exposed to heavy impact.



TECHNICAL SYSTEM



LED Spacing: 3 cm

Minimum LED Type: 12 W/m RGB LED strip

LED-Panel Distance: Min. 3 cm/Max. 7 cm

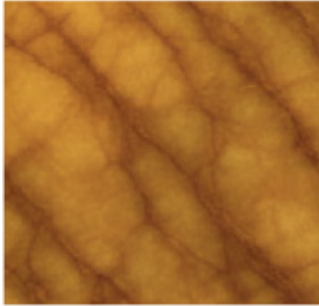
Control Systems: Compatible with RGB/DMX/Wi-Fi/Ethernet

Insufficient LED spacing or uneven lighting may cause a blotchy and non-uniform light appearance on the surface.

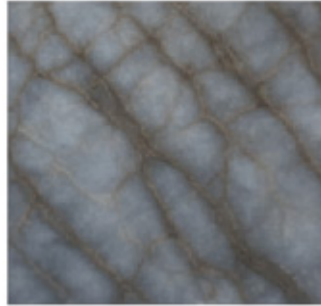


LIGHT COLOR AND KELVIN

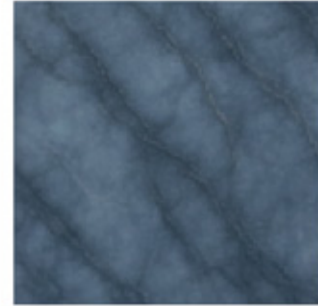
- LED colors should be selected in accordance with the desired color tone to be seen on the product.



Warm White Light
(2700 - 3000 K)



Daylight
(4000 K)



Cool White Light
(6000 K)

Support System:

- A metal or aluminum frame with full surface support must be used.
- Point-load carrying is prohibited.
- An expansion gap of minimum 3–5 mm must be left.



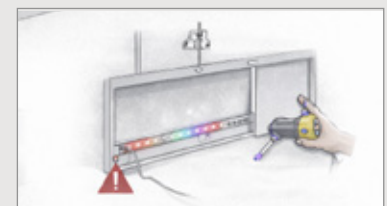
Bonding/Gluing

- Neutral-curing silicone or manufacturer-approved flexible adhesives must be used.
- Acidic and solvent-based products must not be used.



Electrical and LED Access:

- An access panel/cover must be provided for the maintenance of the LED system.
- Electrical connections must be performed by authorized electricians.



ADVICES

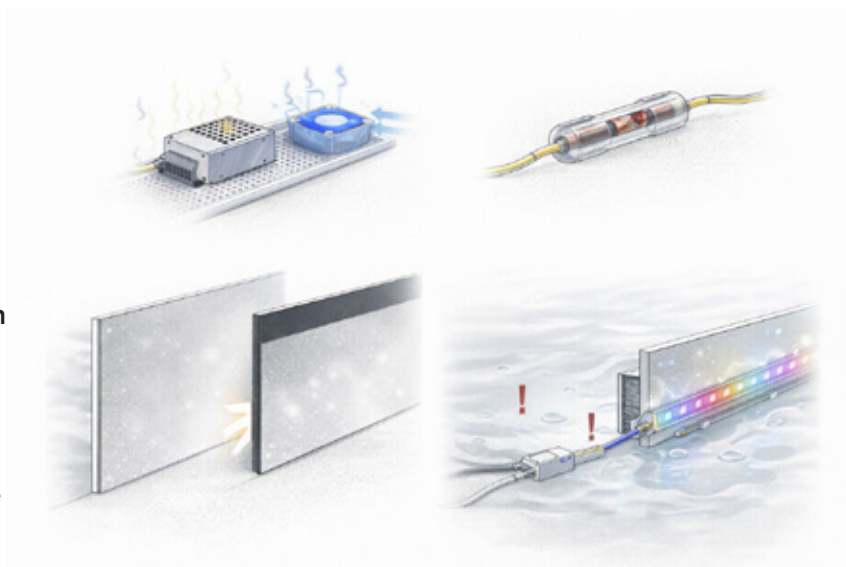
Since it is inevitable for transformers and LEDs to generate heat, the installation areas must be designed in a way that ensures adequate cooling.

Fuses must be used for protection and high-quality materials should be utilized. To prevent light leakage, the use of light barriers or opaque tape on the edges is recommended. If you want the patterns to be more distinct, you can slightly reduce diffusion to increase "contrast"; however, homogeneity should not be compromised. Increasing light intensity will lead to image distortion.

If it is a wet area (bathroom, spa, etc.), the LEDs and connections must have IP67 protection."

Before Application:

- Color tone
- Homogeneity
- Pattern Emphasis
- You should perform your heating behavior test and then proceed.
- The LEDs planned for use should be checked from an appropriate distance behind the plate to see if they provide the desired appearance.



Points to Avoid:

- Gluing LEDs directly behind the quartz
- Using point LEDs ("spotted" light)
- Using high Kelvin
- Not leaving a heat gap
- Should not be used in areas directly exposed to water
- Installing a system without service access



Usage Instructions

- The product is for decorative purposes.
- It must be protected from impact and heavy loads.
- Ventilation must be provided to prevent heat buildup behind the panel.
- The LED system should not be operated at maximum brightness for long periods.
- Ventilation and, if necessary, an appropriate cooling system must be provided.

CONNECTION EXAMPLE

Here is the full English translation of the technical instructions provided in the images:

MAIN COMPONENTS

- LED Transformers (Power Supply): There are 2 units of 40A LED transformers.
- Each one provides energy to a specific LED module group.
- It takes 220V AC input and generally gives 12V DC or 24V DC output (depending on the LED module type in the diagram).

RGB LED MODULES

36A Cat6 communication RGB module 1
36A Cat6 communication RGB module

- These modules provide LED color control (color change, brightness, effect transitions, etc.)
- Communication is done via Cat6 (Ethernet) cable (data communication).

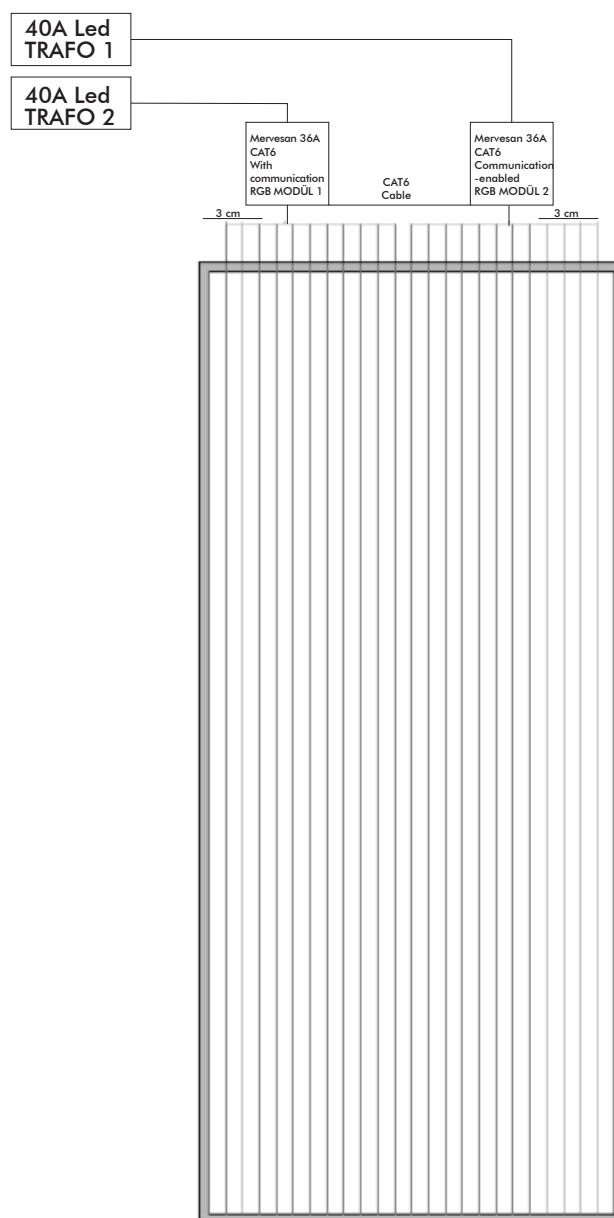
COMMUNICATION INFRASTRUCTURE

The connection between modules is provided with Cat6 cable. These cables guarantee the proper transmission of control signals.

LED Panel Structure

In one panel, LEDs are arranged at 3 cm intervals. A total of 77m of strip LEDs were used. This ensures homogeneous lighting and proper light distribution.

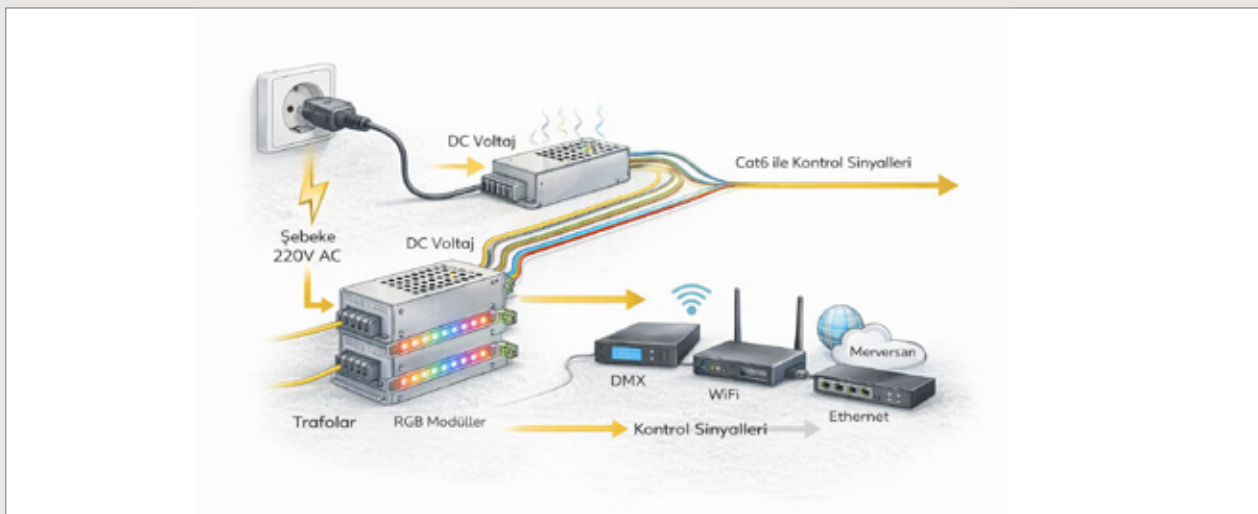
There should be a maximum gap of 7 cm between the surface where the LED is glued and the panel. More than this is not recommended.



Example connection diagram

OPERATING PRINCIPLE

The 220V AC power supplied from the mains is fed into transformers. The transformers convert this power into the required DC voltage for the LED modules. Each RGB module receives control signals via CAT6 and controls its corresponding LED group. The system can be managed through a central control unit (e.g. DMX, WiFi, Ethernet, or a Mervesan control unit).



POWER CALCULATION

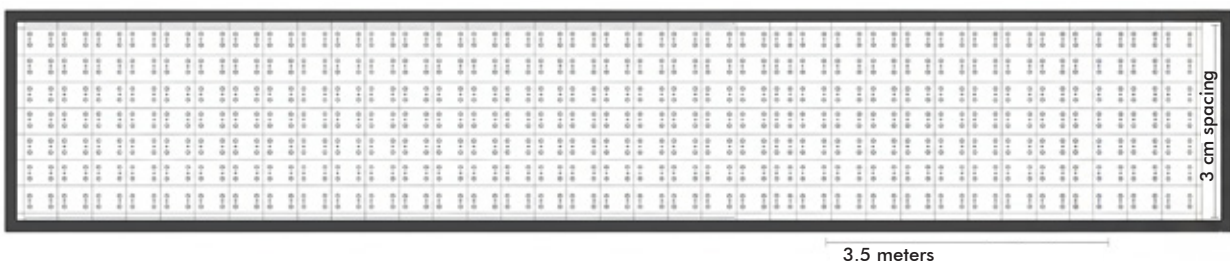
There are 22 rows of LEDs on the rear side of the panel, spaced at 3 cm intervals, and each row has an average length of 3.5 meters.

- Since each meter consumes 12 W:
 $22 \times 3.5 \text{m} \times 12 \text{w} = 924 \text{w}$
- A single panel consumes approximately 924 W of power.

$$\text{Since } P = I \times V,$$

$$924 \text{w} = I \times 12 \text{v}$$

$$I = 77 \text{A}$$



CLEANING AND MAINTENANCE

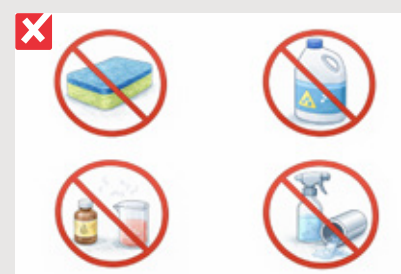
Daily Cleaning:

- Use lukewarm water with a pH-neutral liquid detergent
- Use a soft cloth or microfiber cloth
- After cleaning, the surface must be thoroughly dried
- The rear side of the panel should be cleaned with a dry cloth to remove



Prohibited Products:

- Abrasive sponges
- Bleach
- Acidic and alkaline chemicals
- Solvents and degreasers



STORAGE AND TRANSPORTATION

- Panels must be transported in an upright position using A-frame systems.
- Edges and corners must be protected against impact.
- During long-term storage, exposure to humidity and direct sunlight should be avoided.



WARRANTY AND LIABILITY

■ Applications that do not comply with the principles specified in the User Manual will void the product warranty.

The Lumina Collection delivers its true performance only with the correct LED, proper spacing, and proper installation. Application errors directly affect product performance.





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