Döllken
Lighting
SURTECO GROUP

WATERPROOF LIGHTING SYSTEMS

Comprehensive LED solutions for architects and designers

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EXPECTATIONS VS REALITY

First, let's make something clear: what you are about to see in this section are not our products. This unusual gallery of failed projects is meant to show that even the best design can be spoiled by the choice of an inadequate LED lighting system. Sheer lack of knowledge may ruin the designer's many months of work.

And yet not every LED solution is of the same quality. Mass-produced electronic circuits not created equal and the majority of manufacturers use low-quality components. The strips are often covered with silicone, which turns yellow with time, and resistance to moisture and other atmospheric agents is often limited to the strips themselves, excluding the connectors.

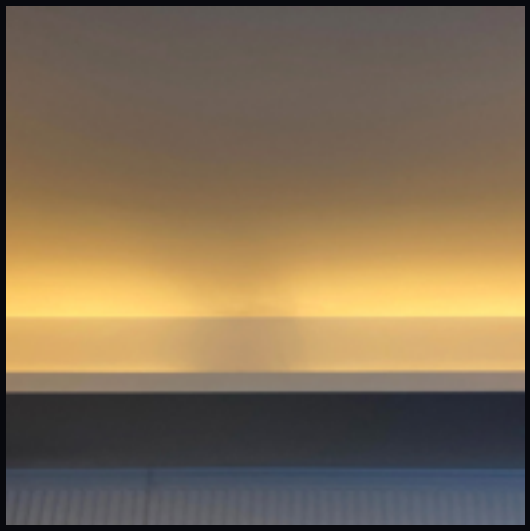
Frank Lloyd Wright once said:
"A doctor can bury his mistakes but an architect can only advise his client to plant vines."
The designers responsible for the lighting system of this hotel would need a lot of vines to cover up their failure...

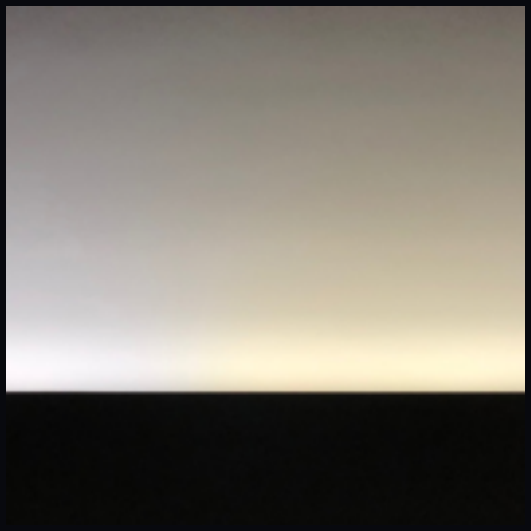
Low-quality components

The use of low-quality components leads to LEDs burning out faster. Within a year, the amount of light emitted may be significantly reduced, even by 30–40%. Many installers and customers are unaware aware of this.. Instead, a common view among contractors is that price is the only factor when it comes to choosing LEDs. The consequence of this can be seen in the picture on the left, which shows a strip installed in one of the most prestigious Polish hotels.

Linear in name only...

In principle, a linear LED should emit a uniformly diffused luminous output, with LED points remaining imperceptible. In the case of the product shown here, the points are still visible. The manufacturer has used a frosted coating only, which does not diffuse light sufficiently. In addition, as a result of using low-quality components, entire strip sections stopped working as intended, and only give a faint glow.





Hidden flaws

Although the LEDs used to illuminate built-in elements remain concealed, their performance also suffers from low-quality components. The result may be a non-uniform luminous output or varying colour temperature (see above).

One of the physical characteristics of silicone is its relatively high degree of porosity, leading to its quick absorption of dust and other impurities, making it a haven for mould growth. That is why LED strips covered with silicone turn yellow with time, resulting in a change to the colour of the emitted light (right).

DÖLLKEN LIGHTING SOLUTIONS

We present the formula for a new generation of products. The components we use are selected from among the most reputable suppliers. Our LEDs are produced through an extrusion process, which allows entire electronic circuits to be encapsulated. The whole production process takes place in Germany. Our products' minimum life time amounts to 50,000 hours of continuous operation, which is why they come with a 5-year warranty.

Extrusion

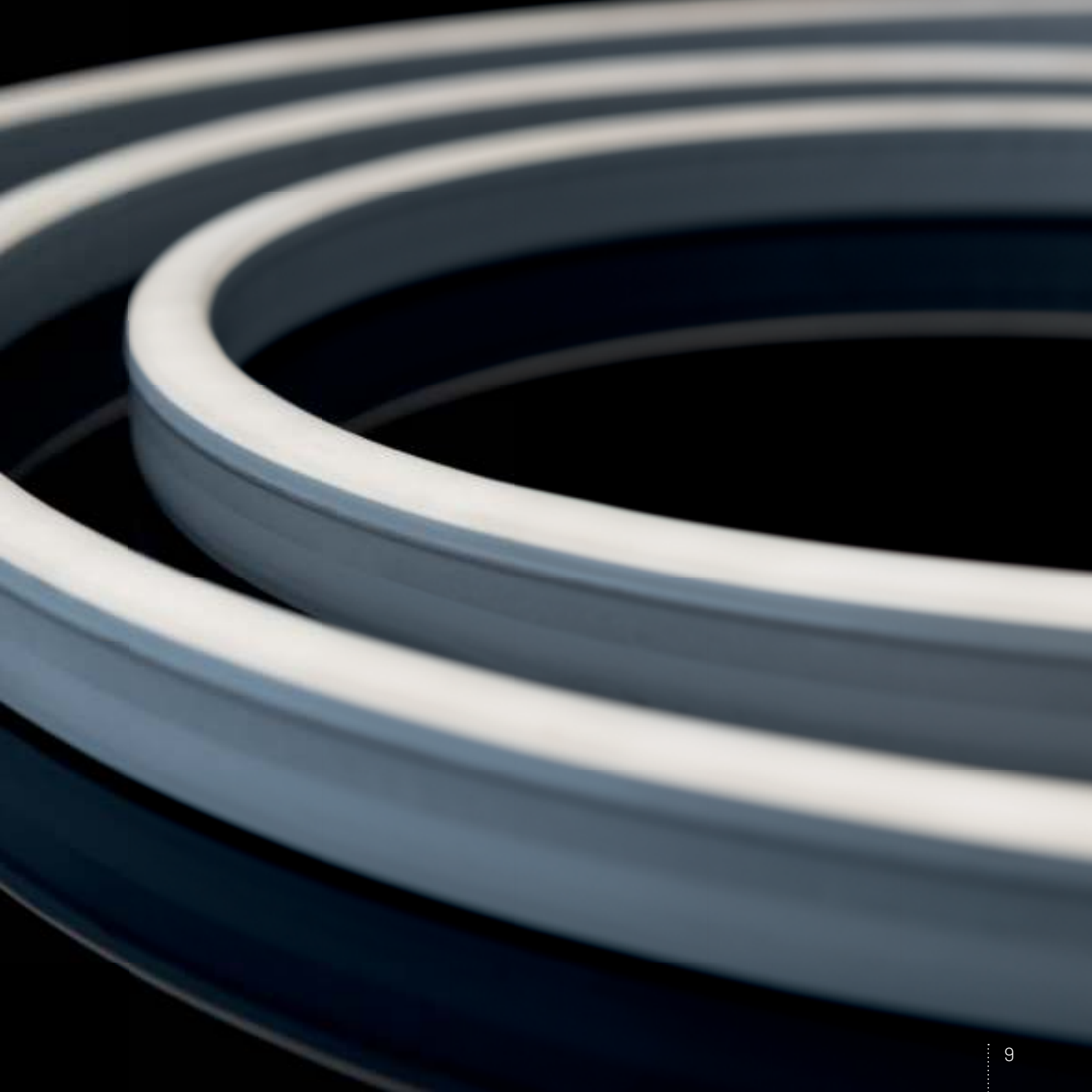
Our electronics are not flooded with silicone. Instead, they are encapsulated with a thermoplastic material. Our LED strips are airtight and highly flexible.

IP68 / IK10

We meet the highest standards. Even in the face of the most ambitious projects our LED strips prove to be a safe and a long-lasting solution, which is evidenced by our compliance with IP68 and IK10 standards.

TPU

Unlike the commonly used silicone, our thermoplastic material (TPU) does not turn yellow over time. It is halogen-free, safe to use, and it meets environmental requirements, which is of importance to many investment projects.



WATERIGHT THROUGHOUT

We went as far as to test our LED system at a water depth of 3,250 metres and it still proved infallible. While your clients may not wish to install their LEDs so deep underwater, they may rest assured that the product they receive comes with comprehensive protection, ensured by the IP68 certificate.

When it comes to designing a bathroom or a wet room, we offer two lines of products. CoreFlex 14 is a system suited for indirect lighting of ceilings, mirrors or furniture. LinearColor Flex 8 emits linear, uniformly diffused light, which makes it is an ideal solution where there is a need for direct lighting.

Private property, Ruda Śląska
LinearColor Flex 8

SHINE AND IMPRESS YOUR NEIGHBOURS

Light garlands, ball-lights, glowing stones, #bohovibes and #cozyhome – cosiness is what attracts buyers these days. It is very often the case that design ideas for balconies or terraces are nothing but duplicates of what is found on prominent Instagram profiles.

After all, the use of solid materials does not preclude the possibility of enjoying a cheerful atmosphere. While watertightness, flexibility, mechanical resistance are not the kind of hashtags that attract much attention, these are the concepts which extend the designer's repertoire the most. Try out our LED system and let your clients shine.

Apartment with a deck, Katowice
LinearColor Flex 8

UNLEASH YOUR IMAGINATION

Who does not dream to live in a place adorned with greenery? Soon after laying the foundations for the new house, its owners already begin to visualise the well-tended flower beds surrounding it. While the finishing touches are being made to the living space, the lawn-mower is waiting impatiently to join the busy hum of neighbouring lawn-mowers one Saturday.

Imagination, however, sometimes needs a little help. When designing the surroundings of the house, it is worth taking into account the positioning of power outlets. Once the waterproof LED system has been plugged in, the owner's dream garden will look impressive even after dark.

Private property, Mikołów
LinearColor Flex 8, CoreFlex 14


7F

SPACE ADORNED WITH LIGHT

Many architects have secured their place in the annals of architecture with creations that sit in harmony with the surrounding public space. In cities which are home to feats of old architecture, great efforts are made to preserve and highlight their aesthetic value. This attracts tourists and improves the comfort of the city dwellers.

Our lighting systems installed in the fountain at the Chrobry Embankment in Szczecin and on the Józef Piłsudski Bridge in Cracow contribute to the preservation of these important works of the 20th century. We also proved waterproof LEDs to be the right choice for adorning public spaces with light.

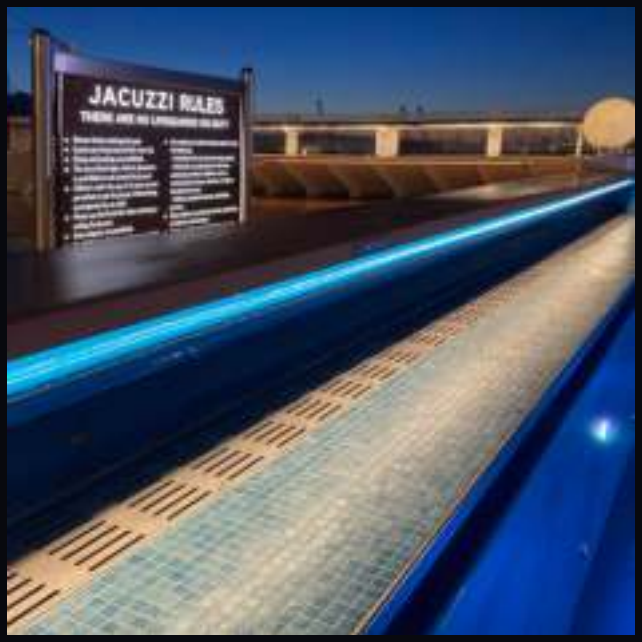
The fountain at the Chrobry Embankment, Szczecin
LinearColor Flex 8

SAFE SOLUTIONS FOR UNCHARTED WATERS

The production process of our LEDs ensure their complete and lasting protection against water, salt, oils, fuel, chemicals, as well as against mechanical damage. That is why our systems can be found not only in home swimming pools, but also on cruise ships and yachts.

Our solutions fit perfectly with the highest quality materials used in modern vessels. On large ferries, LED systems serve specific functions – marking emergency routes and aiding navigation around the ship. They also enhance the splendour of a luxury yacht's interior and bring out the unique features of every vessel.

Sunreef 80, Sunreef Yachts
LinearColor Flex 8


JACUZZI RULES


SAUNA

TECHNICAL DATA – SELECTED MODELS

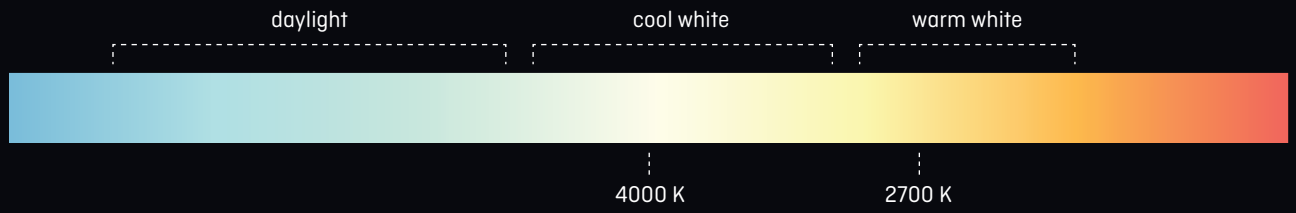
LinearColor Flex 8

Model	1110	1140	03RGB	05RGBW
Dimensions	8 x 14 mm	8 x 14 mm	8 x 14 mm	8 x 14 mm
lm/m	120 lm/m	530 lm/m	170-340 lm/m	170 lm/m
W/m	4,8 W/m	19,2 W/m	33,7 W/m	33,7 W/m
CCT	2700 K / 4000 K	2700 K / 4000 K	RGB	2700 K + RGB
Step length	50 mm	50 mm	57 mm	57 mm
Max. length per connection	8,5 m	4,2 m	5,13 m	5,13 m

CoreFlex 14

Model	1110	1140	03RGB	05RGBW
Dimensions	14 x 4,7 mm	14 x 4,7 mm	14 x 4,7 mm	14 x 4,7 mm
lm/m	400 lm/m	1300 lm/m	440-800 lm/m	440 lm/m
W/m	4,8 W/m	19,2 W/m	25,3 W/m	25,3 W/m
CCT	2700 K / 4000 K	2700 K / 4000 K	RGB	2700 K + RGB
Step length	50 mm	50 mm	57 mm	57 mm
Max. length per connection	8,5 m	4,2 m	5,13 m	5,13 m

Colour temperature scale



ABOUT THE COMPANY

Döllken Lighting provides complex and reliable lighting solutions suitable for both large investment projects and small private ones. Our LED systems are used in the lighting design of bathrooms, terraces, elevations of buildings, gardens, driveways, parking lots, swimming pools and even yachts and bridges.

While product and design are always important, our main focus is on people and their needs. We are flexible and accommodating with each commissioned project. Our LED systems are adapted to specific project needs, adhering to precise guidelines on power, colour and length. Our solutions have a proven track record all the way from concept to reality, which is why we offer guaranteed support and professional advice together with the product.

Döllken Lighting

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