



# Competence in Light

For your illuminated advertising and lighting design ideas

***hansen***  
technologie · elektronik · licht

The solution is always simple,  
one just has to find it. [ A. Solzhenitsyn ]

Founded in 1984 as "Neontechnik Hansen", Hansen is a specialist when it comes to customized solutions. We manufacture custom-made products according to specification, which is much appreciated by our customers.

During the initial years, our main business was the production of electronic control gear for neon systems. About 15 years ago, the LED made its way into the illuminated advertising industry, providing new impetus. This energy-efficient technology is now our main focus.

All our LED products are developed and manufactured in-house, and our long-time employees have become specialists in this field. Their know-how and experience helps us to take lighting design to a new dimension. From functional illumination to aesthetic mood lighting or light art – the result is always unique.

Custom-made light      made by hansen = made in Germany

## Energy-saving products

LED products are highly efficient, and LED technology has already established itself in all areas of daily life. Besides form and function, energy-efficiency is one of our top priorities when developing new products, leaving us well-prepared for future trends.

This catalogue is supposed to serve as a guideline showing examples of what is possible using our products, although the actual range of applications is of course much wider.

We are always happy to advise you. Our expansive networks of representatives means that there is always an expert nearby when needed on site.

Benefit from our experience.

[www.hansen-led.com](http://www.hansen-led.com)

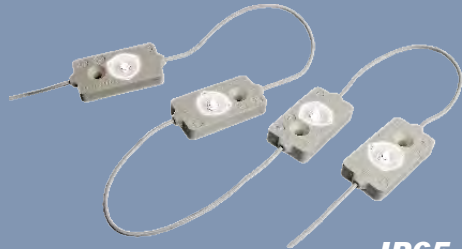


We make your ideas shine

Get inspired ...

# LED Tube

- Large radiation angle ▪



IP65

## Radar-LED

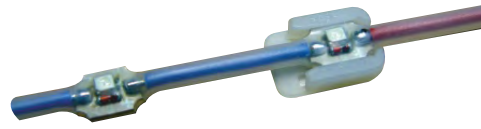
Flexible system for the illumination of large, flat illuminated bodies with a depth of 60–150 mm

For backlighting acrylic glass, banner fabric or other translucent materials

The Radar-LED in detail:

- Radiation angle: 160°
- Luminous flux: 70.1 lm at 4,000 K
- Homogenous illumination
- Long supply cable possible
- Reliable series connection
- Highly safe system
- Low LED operating current ensures long lifetime

# & LED Chain



## LED Tube – the patented light system



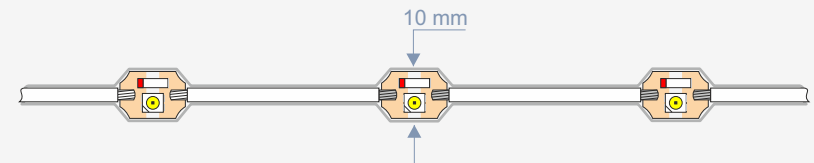
LED circuit board as used in the LED Tube (enlarged view)

IP3x

	Standard LEDs	Standard PLUS LEDs	Power LEDs
25 mA	○ ● ●		
50 mA	● ● ●	○ ● ●	
100 mA			○ ● ● ●

The **LED Tube** consists of a chain of light emitting diodes mounted on small printed circuit boards, which are connected by insulated wires. This chain of LEDs is enclosed in a heat-shrink tubing forming the **LED Tube**.

Electrically, the **LED Tube** is a series connection of LEDs. The advantages of this system: It is highly reliable and very energy-efficient.



A variety of suitable converters – dimmable and non-dimmable – is also available from Hansen.

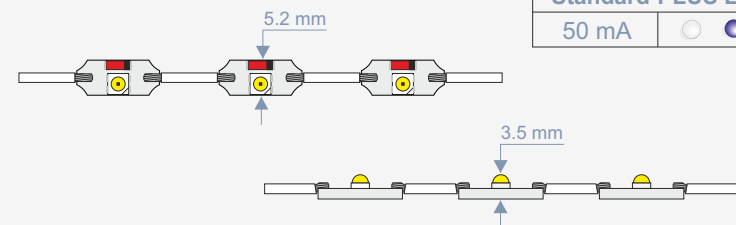
## LED Chain for solid acrylic letters

Designed to be embedded in solid acrylic letters with a transparent casting compound

- Without heat-shrink tubing
- LED spacing: 20 | 25 | 30 | 40 mm
- Circuit board width: 5.2 mm
- With 0.8 mm insulated wire
- **Optimized for low colour shift caused by embedding**



IP00



Standard LEDs	
25 mA	○ ● ●
50 mA	● ● ●

Standard-PLUS LEDs	
50 mA	○ ● ●

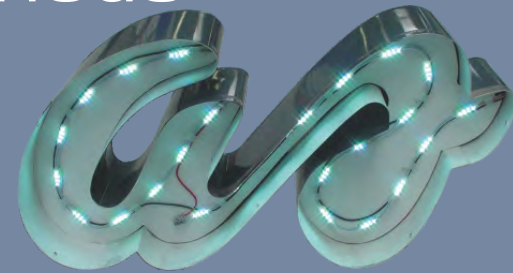


... as cove lighting

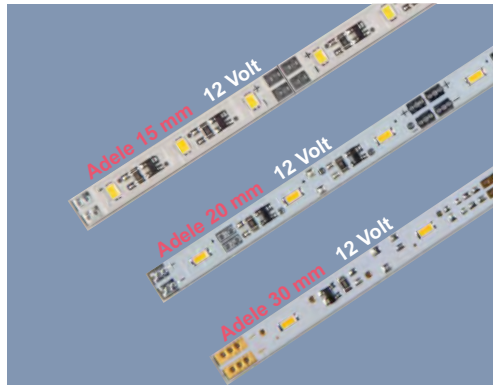
channel letters      solid acrylic

bright      homogenous

flexible



# LED Circuit Boards



## Linear circuit boards

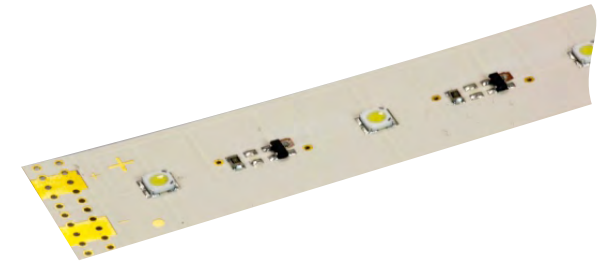
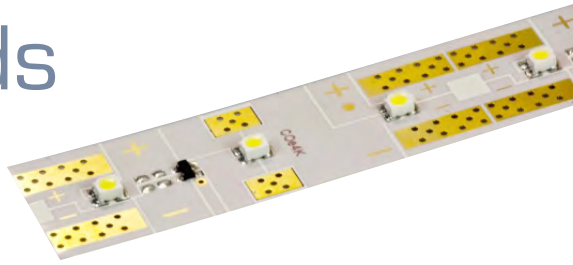
- Flexible LED strips for 12 V / 24 V or series connection
- Rigid LED strips for 12 V / 24 V
- RGB and RGBW LED strips

## Circuit boards in special shapes

Round, oval, custom shapes

## Applications:

- Indirect lighting
- Cove lighting
- Illuminated lines
- Edge lighting
- RGB(W) colour change
- RGB(W) running lights
- Object illumination



## LED circuit boards – rigid or flexible

### Linear circuit boards

are available from a large selection:

- Width: from 3 mm
- Length: any, the strips can be extended or shortened as required
- Brightness: Standard, Standard PLUS or Power LEDs
- LED spacing: from 12 mm to 30 mm
- RGB(W) LED strips with a max. spacing of 30 mm

### Flexible circuit boards

can be bent and adapted to any design. The ribbon-like strips are frequently used in escalators, light covers or oval light boxes.

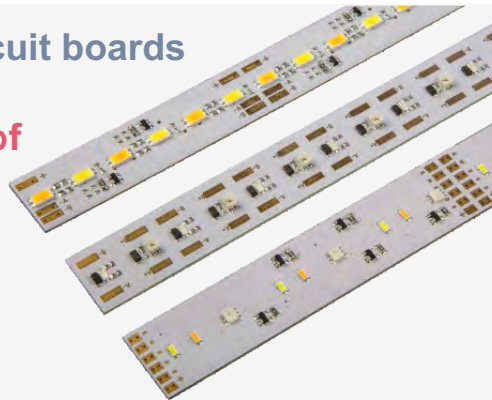
- For 12 V / 24 V and series connection



Suitable 12 V/24 V power supply units or converters (series connection) are available from stock.

## LED circuit boards

Mixing of two colours of light



## LED circuit boards – higher rating

LED circuit board for series connection





# Indirect light

cove lighting

theatre & cinema lighting

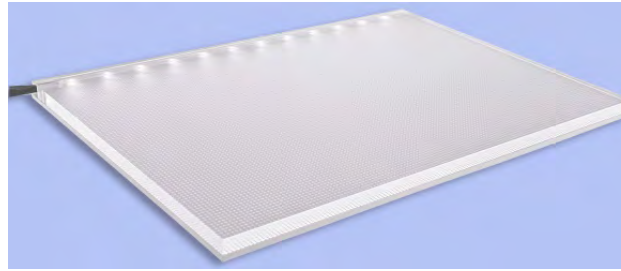
wall & ceiling lights

ceiling illumination

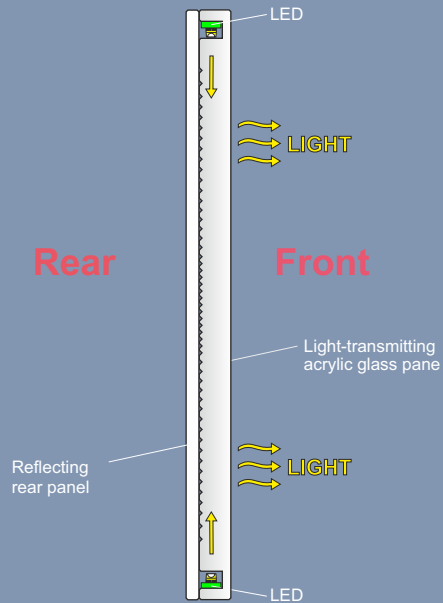
corridor lighting



# Luminous Panels



## Sectional view



**Slim** version: ultra thin and lightweight with an overall depth of 8 mm. 24 V system designed for indoor use.

**Basic/Eco** version: with an overall depth of 11 mm, suitable for indoor (12 V) and outdoor use (series connection).

**Power** version: 13 mm overall depth, designed for indoor use as 24 V system with parallel series connection.

Custom shapes, colours and sizes – even with openings – available. Please contact us for advice.

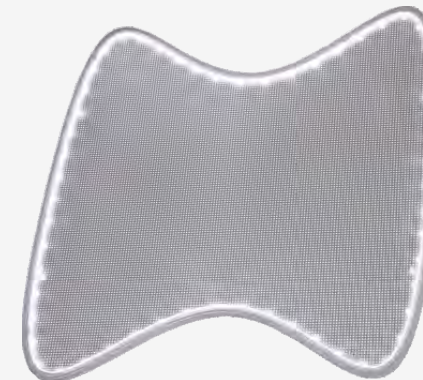
## Luminous Panels – custom sizes, shapes and colours

The **Luminous Panel** is a flat, large-surface luminaire made to measure. The panel is available in four power classes as **Slim**, **Basic**, **Eco** and **Power version**.

The Luminous Panel can be supplied not only with simple white light, but also with two different colour temperatures (allowing warm/cool light mixing) and with RGB(W) LEDs. These can be controlled with our innovative radio remote controls.

### Typical applications:

- **Lighting element** for walls or ceilings
- **Glare-free wall luminaire** for kitchens and bathrooms
- **Backlighting** of artificial stone, acrylic or textiles, also for **large surface areas**
- **Illumination** of decorative glass elements
- **Illumination** of flat light boxes
- **Recessed luminaires** in 600 or 625 mm grid ceilings



Hand-held transmitter

The Luminous Panels can be illuminated by LEDs from one, two or four sides.

The smallest available size is 80 x 80 mm for which illumination from one side is perfectly sufficient. The maximum height for panels illuminated from one side is approx. 750 mm.



Application example for double-sided illumination

### Installation areas

For **indoor** installation:  
in heated rooms without humidity

For **outdoor** installation:  
typically on building facades, subject to humidity and changing temperatures. Suitable protection against ingress of humidity between the acrylic panes must be provided by the customer.





# Backlighting

light & art    advertising

luminous panels

light fields

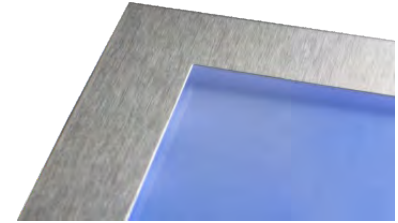
for walls

& ceilings



# 20 mm Aluminium Frame &

# 30 mm Magnetic Frame



20 mm frame with mounting profile for simple mounting



Back view

The new Aluminium Frame for our Luminous Panels has a width of only 20 mm all round. Like the Luminous Panels it is manufactured entirely in-house and offers a good alternative to the proven magnetic frame. Particularly in larger sizes the **20 mm Aluminium Frame** provides a more cost-efficient option with much shorter delivery times.

## Fitting Luminous Panels

Both frames can be used with all 12 or 24 V versions of our Luminous Panels.

The 20 mm Aluminium Frame and the 30 mm Magnetic Frame are not suitable for outdoor use.

Please contact us for further technical details and dimensions. We shall be happy to advise you.

## 20 mm Aluminium Frame – the slim alternative

**New!**

20 mm frame width all round



Front view

IP20

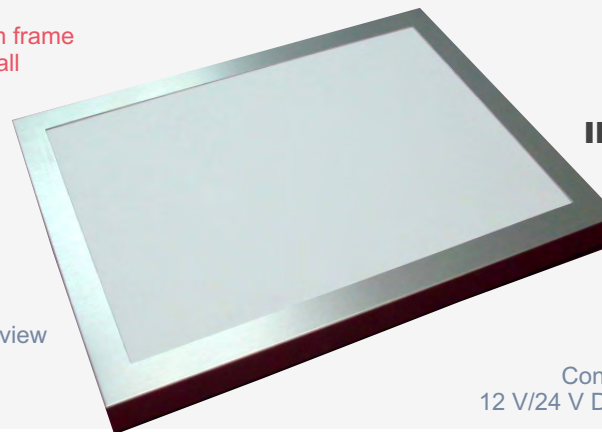
Connecting cable to 12 V/24 V DC power supply



Back view

## 30 mm Magnetic Frame – simple to handle and attractive to look at

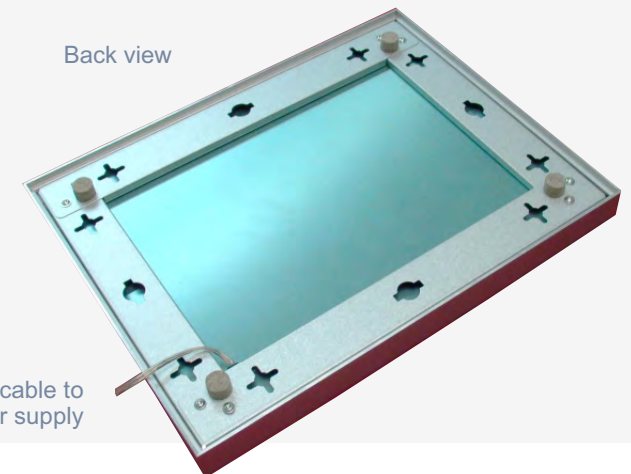
30 mm frame width all round



Front view

IP20

Back view



Connecting cable to 12 V/24 V DC power supply

# Aluminium/Magnetic Frames

decorative homogenous LED light  
art & space illumination

LED illumination from one, two or four sides

2,700 K 3,000 K 4,000 K 5,000 K 6,500 K

custom sizes



# Shaped LED Boards

- Large letters & surfaces ▪



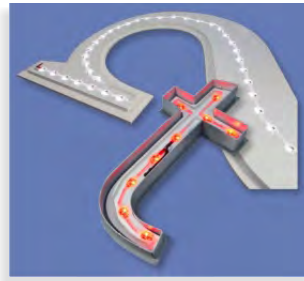
Made to fit using high-quality materials

Custom shapes

Simple installation of the finished LED boards

Applications:

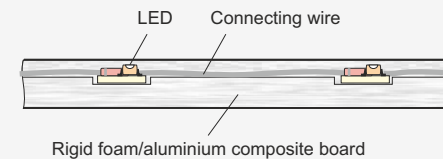
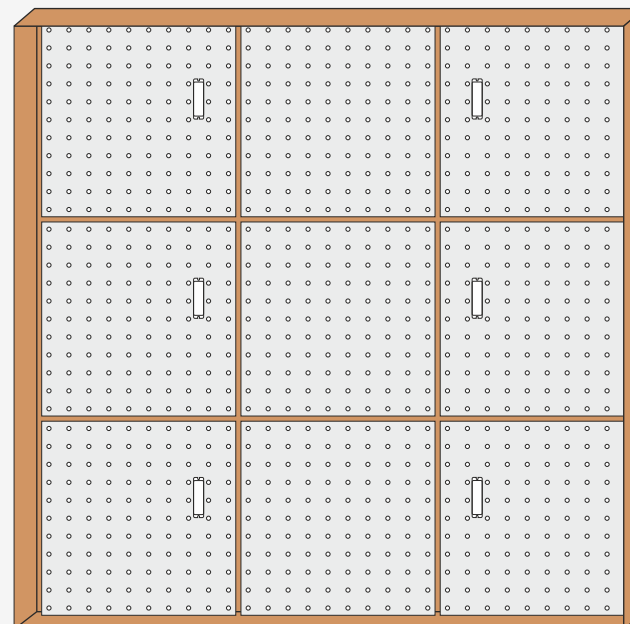
- Wall and ceiling lights
- Large-area backlighting
- Bars and counters
- Outdoor advertising signs
- Large channel letters



## Shaped LED Boards – for backlighting large surface areas

The LED boards are made of rigid foam or aluminium composite board. The LEDs are pre-wired and fully embedded in grooves milled into the boards.

They provide a compact light source for backlighting acrylic glass, banner fabric or similar translucent materials.



The Shaped LED Boards are made to customerspecification and drawings only. Custom shapes and letter-shaped inlays can be produced as well.

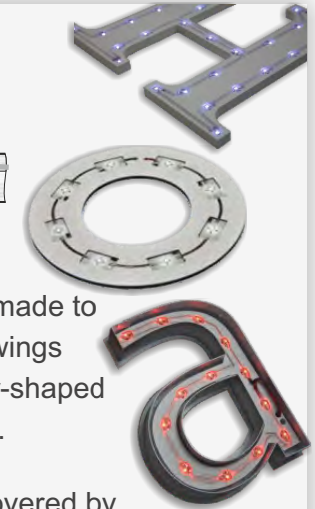
Larger surface areas can be covered by combining individual segments.

Maximum board size: 1,200 x 1,200 mm

**IP65** – The Shaped LED Boards are particularly suitable for outdoor installation.

### Simple and quick installation

The Shaped LED Boards come with the LEDs spaced at correct intervals and pre-installed converters. All that needs to be done is fix the LED boards onto the desired surface and connect the wiring!





# Backlighting

large surfaces and shapes  
wall & ceiling lighting  
in lifts and elsewhere



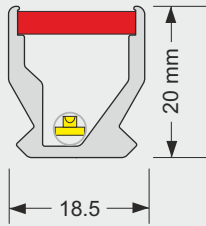
bars &  
counters



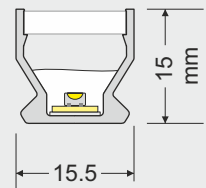
# Mini Profile & LED Pipe

- Fine illuminated lines with Mini Profiles

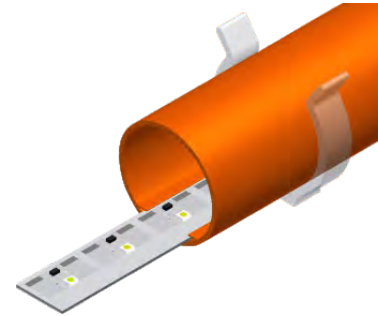
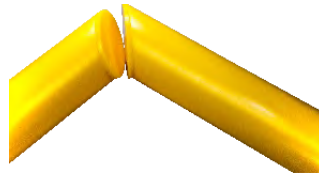
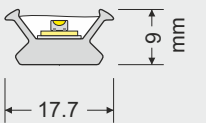
Type 911



Type 220



Type 5



## Mini Profile – fine illuminated contours made to measure

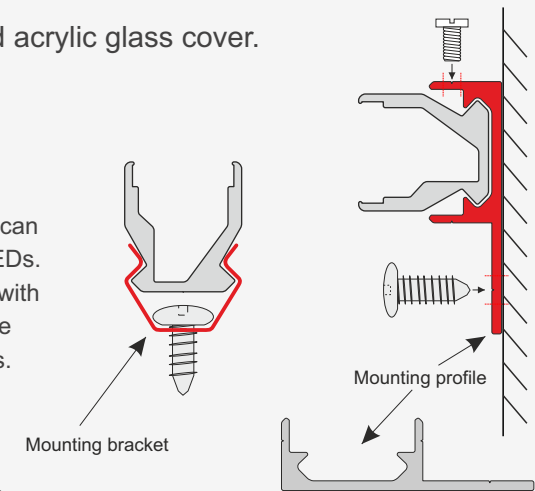
The **Mini Profile** consists of an aluminium profile with a coloured acrylic glass cover. The profile contains LED strips embedded in artificial resin.

Available with different LED spacings and LED types.

The profile type 940 and 960 can also be supplied with **RGB** LEDs. Type 5 and 220 can be fitted with **W-W** and **RGB** LEDs to create attractive illuminated contours.

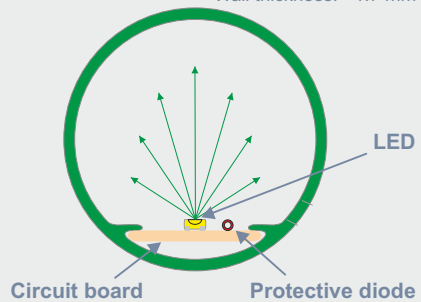
The profiles are installed using robust mounting brackets or a mounting profile.

**IP65**



- Colourful homogenous LED light with the LED Pipe

Acrylic pipe:  $\varnothing$  38 mm  
Wall thickness: ~1.7 mm



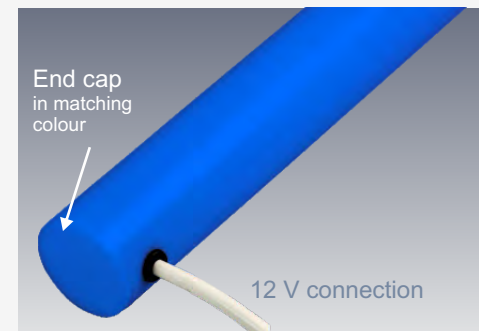
## LED Pipe – for contour lighting and creative art objects

The **LED Pipe** consists of a coloured acrylic pipe with a diameter of 38 mm and an integrated LED strip.

**IP65**  
**IP30**

Available in six acrylic colours and five LED light colours.

The LED Pipe can be mounted on walls using our transparent snap-in pipe holders, plastic tie mounts or fixing rings. Available with 12 V circuit boards for indoor applications and with insulated circuit boards in series connection for outdoor applications.



# Illuminated contours

orientation lighting

shadow-free LED light lines

stairway lighting handrails stairs

custom furniture light channels

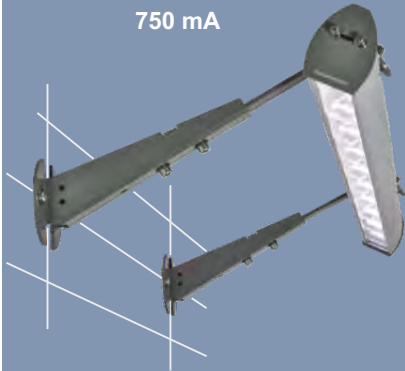
positioned close to the wall



# Wall Floodlight in V Profile

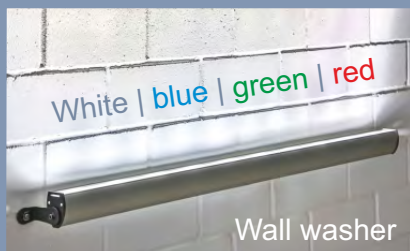
Very powerful with 2.25 W LEDs in series connection

750 mA



With its adjustable wall mounts the **Wall Floodlight in V Profile** can be flexibly installed to shine upwards or downwards. Even vertical mounting is possible.

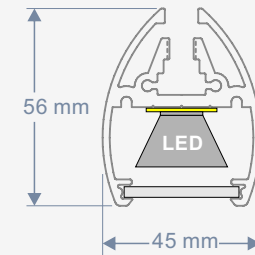
Installed as “wall washer” it can be used to illuminate large areas of building facades. Available LED colours: white, blue, green or red



## Wall Floodlight in V Profile – with external or integrated converter

Designed for the illumination of outdoor signs and advertising spaces with a height of up to approx. four metres. The aluminium profile has a silver-coloured anodized surface providing durable protection against corrosion. The High-Power LEDs are fully embedded providing an IP rating of 65.

Custom lengths up to 3,000 mm in one piece can be supplied as well as special lengths up to 4,000 mm. The profile can be extended as required using special connectors. Various lenses can be specified to ensure optimum direction of the light.



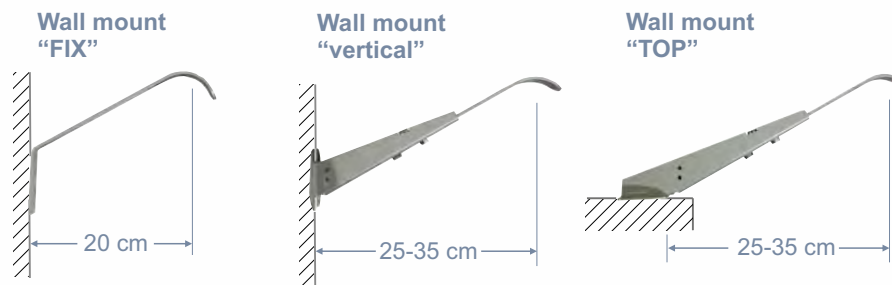
Available lenses  
30° | 10° | 10 x 42°

**IP65**

Colour temperatures:  
3,000 K  
4,000 K  
5,000 K  
6,500 K



### Flexible length, angle and height adjustment



**Wall washer:** end cap and angle bracket allow adjustable mounting angle







# Wall Floodlight

bright and homogenous illumination

vertical

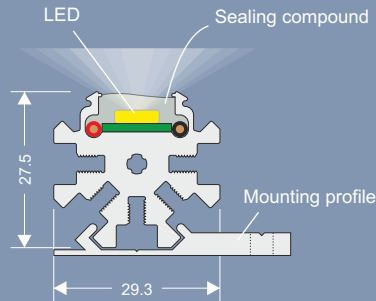
horizontal

wall washer

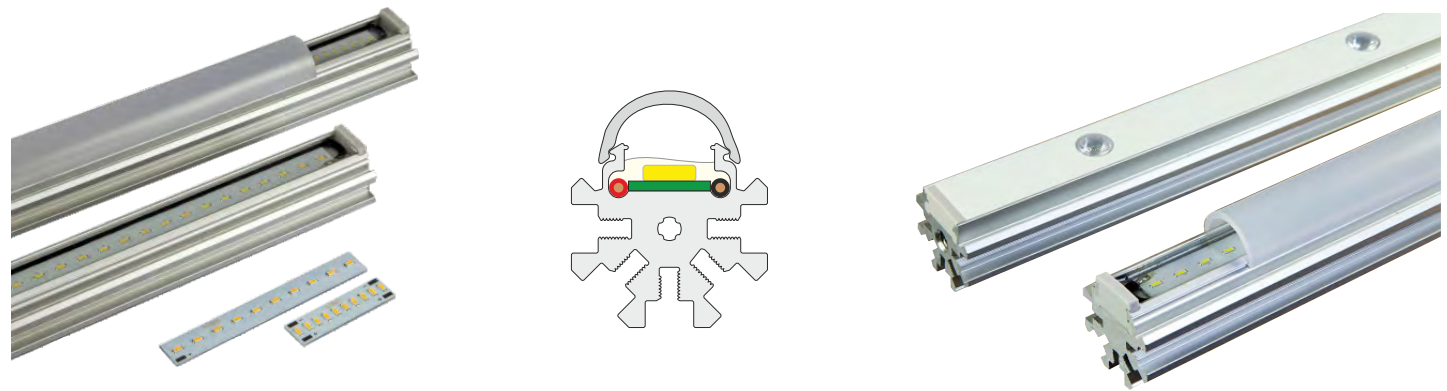
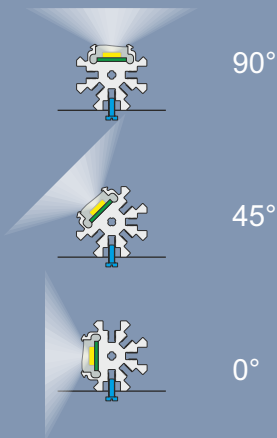


# Star Profile

Powerful for bright light, easy to use in outdoor applications



The profile can be mounted at different “viewing angles” allowing the illumination to be perfectly adapted to the surrounding conditions.

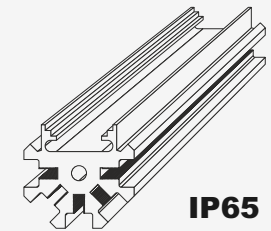


## Star Profile – as linear luminaire or for object illumination

The **Star Profile** is an aluminium carrier profile designed to accommodate powerful 1.5 W High-Power LEDs or 1.5 W LED modules.

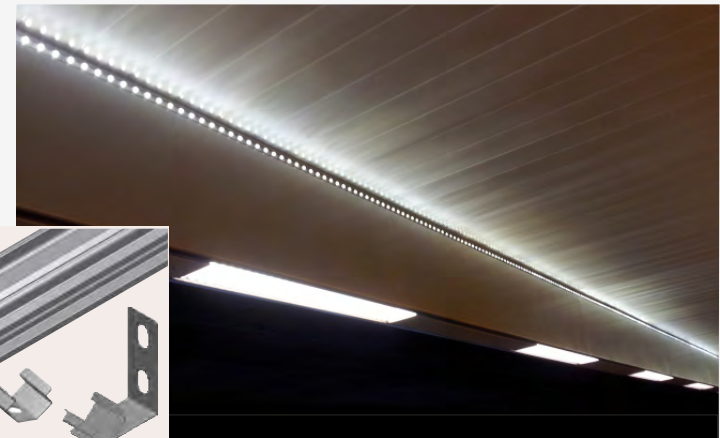
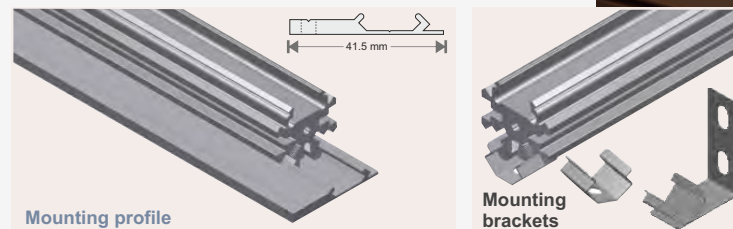
The LEDs are embedded in a sealing compound and can be equipped with additional lenses reducing the angle of radiation to generate a more concentrated light.

40° | 23 x 45°  
Available lenses

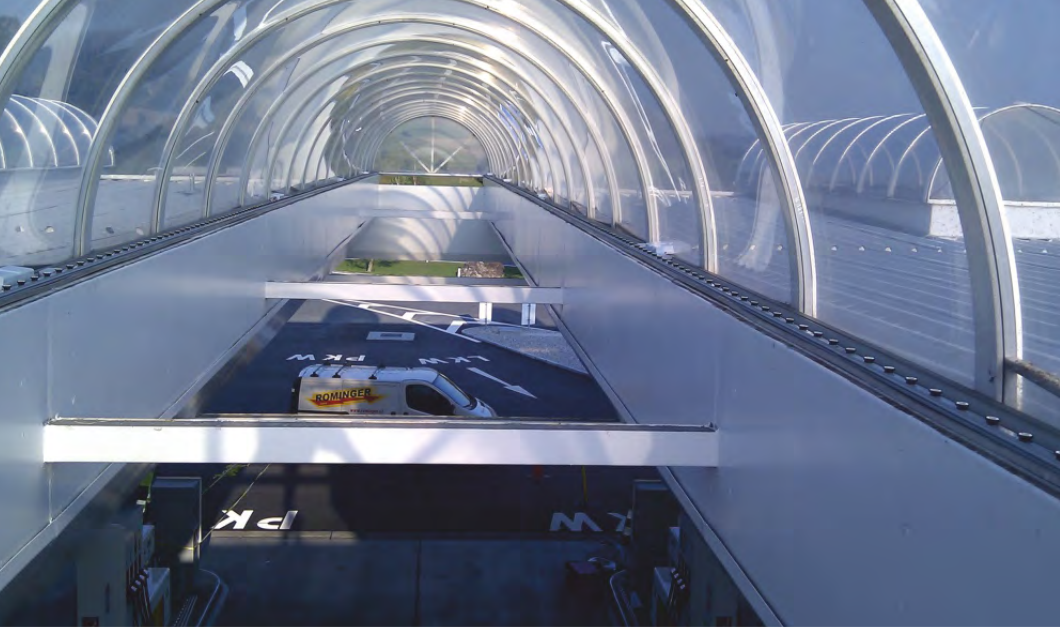


The Star Profile is particularly suitable for outdoor applications.

Available colour temperatures:  
3,000 K | 4,000 K | 5,000 K | 6,500 K  
Available with different LED spacings.



The profile can be installed using mounting brackets or a mounting profile.  
**Custom lengths** up to 3,000 mm in one piece can be produced.



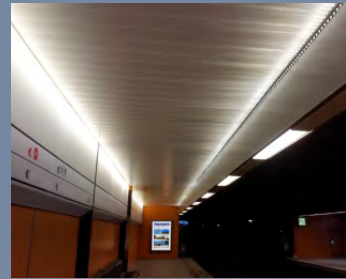
# Floodlighting

illumination of objects

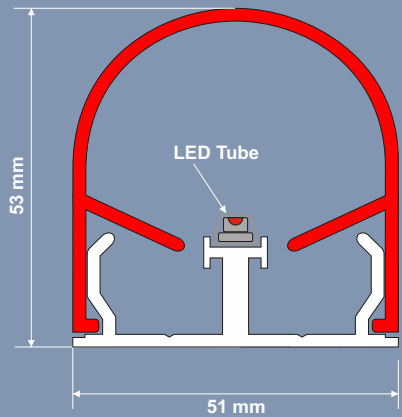
gallery lighting

indirect ceiling washlight

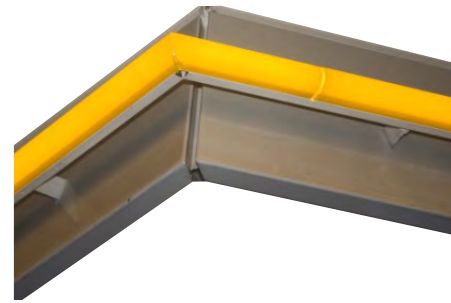
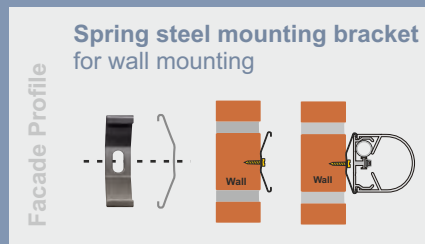
floodlights hall lighting



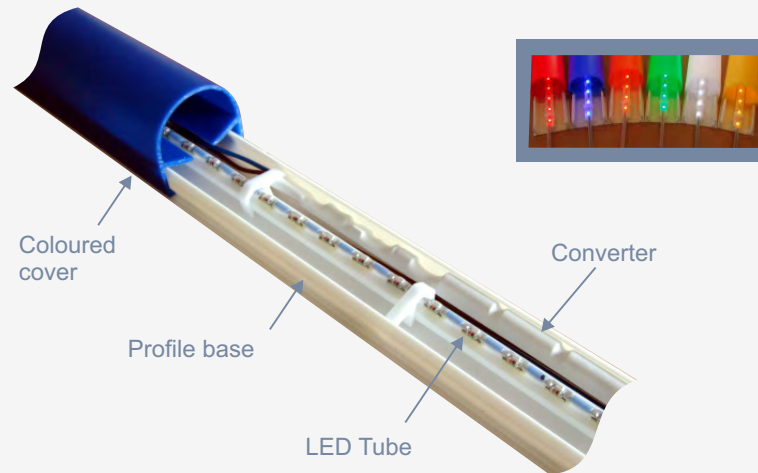
# Facade Profile



- Custom-made to specification
- Complete and ready to install
- Easy installation around corners and at angles
- Six acrylic and five LED light colours
- Seamless connections through joint sealing tape

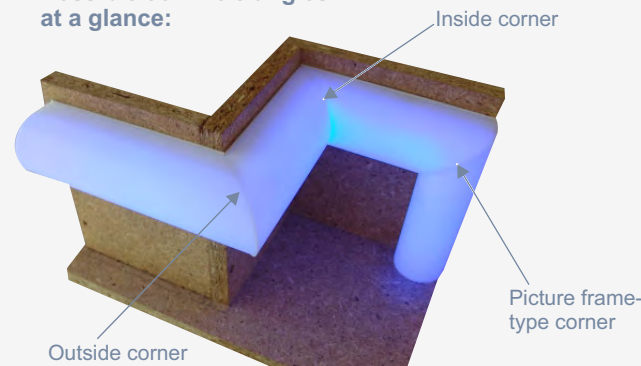


## Facade Profile – coloured contour lighting for buildings



**IP65**

**Possible 90° mitre angles at a glance:**



- Simple and cost-efficient installation
- Uniform seamless illuminated contours without dark zones, around corners and at angles
- With day and night effect
  - illuminated LEDs during the night
  - coloured acrylic covers during the day
- No additional transformers required  
all the technical equipment is housed in the profile
- Long reach – up to 150 m of profile can be powered from a single power supply point
- Designed for harsh environments





# Outdoor lighting

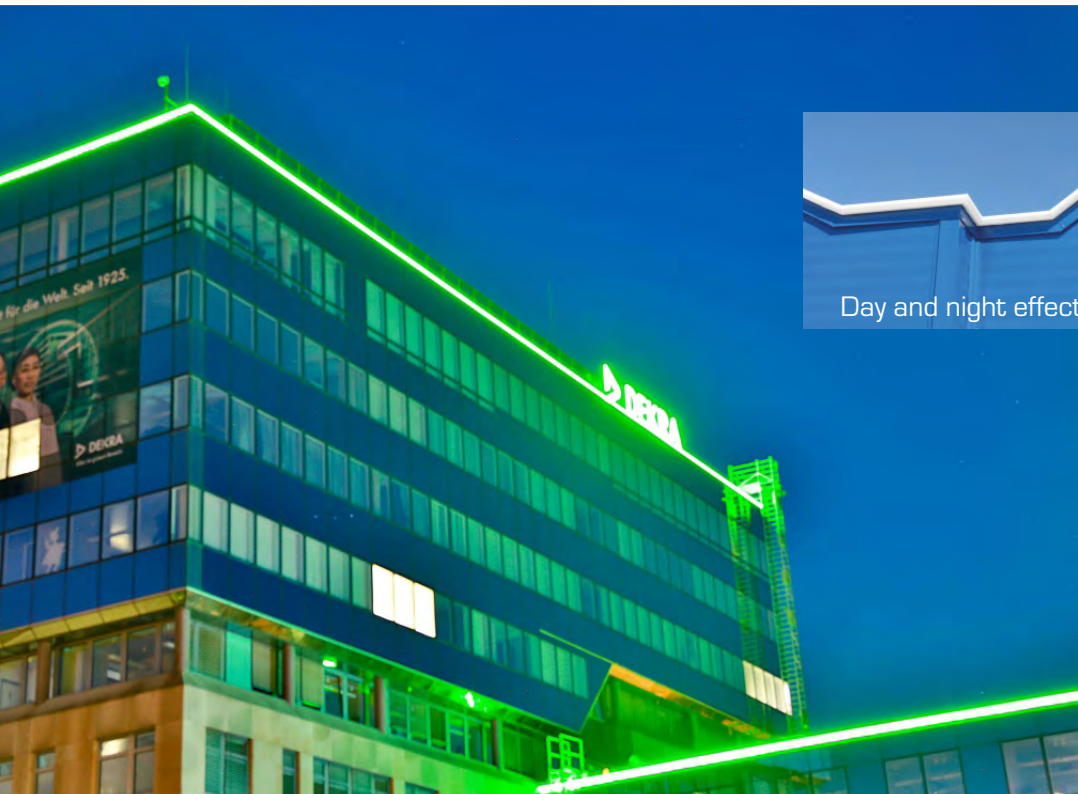
architectural lighting

illuminated contours

street & town square lighting

## LED lines

in shadow gaps

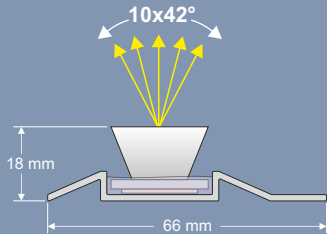


Day and night effect

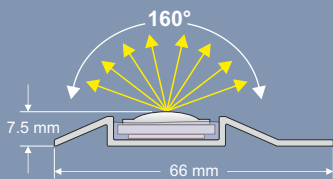


# Frame-mount Spots & 160° Spots

Bright homogenous light for large light boxes – mounted on the inside of the frame ...



... or as 160° spots mounted on the rear panel of the light box.



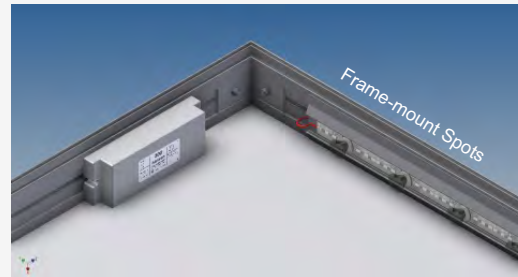
- Combined cooling and mounting plate ensures uniform distances.
- Custom lengths up to 3,000 mm  
Special lengths up to 3,980 mm
- Available colour temperatures:  
6,500 K | 5,000 K | 4,000 K | 3,000 K

Maximum luminosity with minimum energy consumption

## 160° Spots



With High-Power LEDs – more power and brightness with 2.25 watts

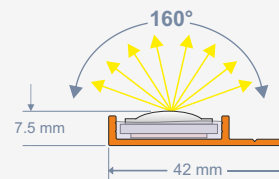


Ideal for large single- or double-sided light boxes

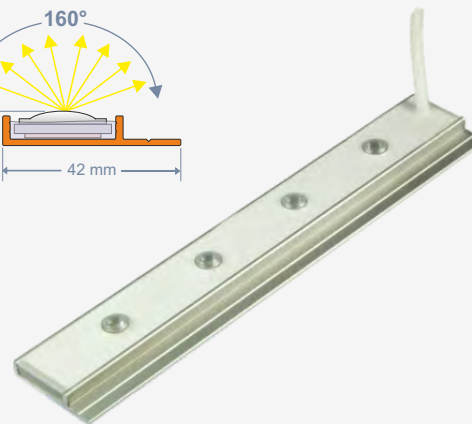
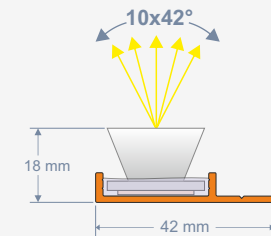
The **Frame-mount Spots** feature LEDs with lenses (10 x 42°) and are designed to be installed on one or two opposite frame sides. The inner frame surfaces must reflect the light well. The diffused and reflected light then ensures a nearly uniform illumination of the display area.

The **160° Spots** are designed to be mounted on the rear panel of the box, i.e. the LEDs are directed towards the illuminated area. The large angle of radiation ensures a homogenous light distribution.

Optional – with universal F profile



F profile



IP65



# Illuminated advertising

bright LED light

high efficacy

low costs

long lifetime



# RGB Components

RGB stands for the three primary colours

**Red** **Green** **Blue**

RGB light consists of red, green and blue light. These three primary colours can be mixed to create up to 16 million light colours.

Adding a white channel gives so-called RGBW light.

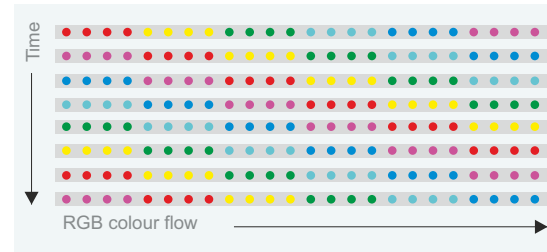


RGB light can be generated with LEDs containing three coloured LED chips in one housing or with three individual coloured LEDs.

This allows dynamic colour mixing or the generation of special corporate light colours such as magenta or turquoise.



LED circuit boards with two and three different coloured LEDs for the generation of mixed colours



## RGB-W | coloured light effects and animations | pastel and mixed colours

We offer a range of LED circuit boards for RGB/RGBW colour change and RGB running light effects



### Radio remote control



Infrared remote control, flat-type



### Slave module

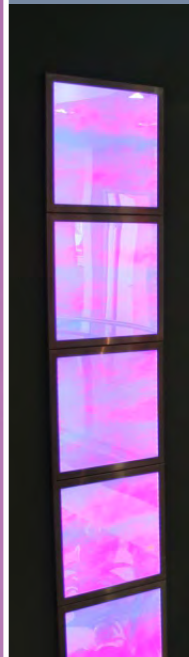




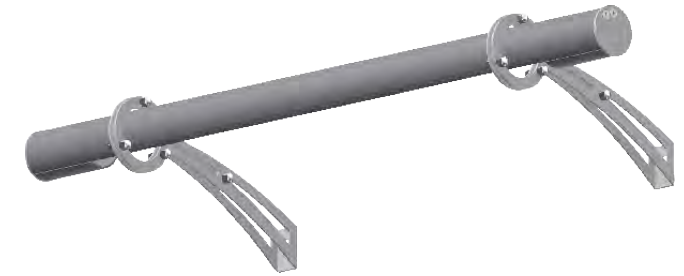


RGB - W

coloured light  
animated light effects  
mixed colours



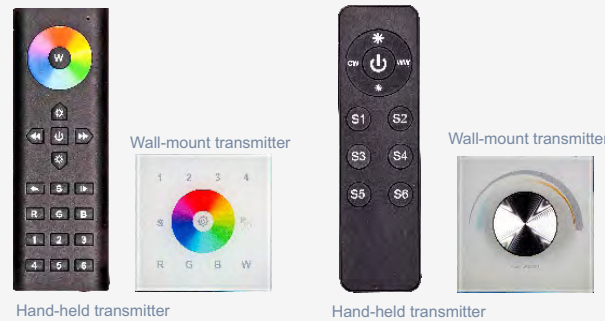
# Other Electronic Products



## & Light Profiles

- LED converters for series connection
- Power supply units for extra-low voltage
- DALI control DALI converters
- Converter housings Converter cabinets
- Dimmers and flashers
- Sensors ambient light / daylight
- Measuring and testing devices
- SIRIUS 20W / 24W LED replacement for E27 lamps

### Radio remote controls – for dimming and RGB/RGBW control



The following **hansen** LED products can be operated with the radio remote controls:  
**Luminous Panel · LED Pipe · Mini Profile type 5 and type 220**

The new family of innovative controls uses radio technology to transmit control signals between a remote control and receiver.

All functions can be controlled using this remote control.  
 Transmission range: 20 m

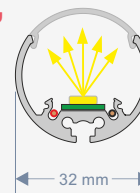
The following functions can be controlled:

- **Single-channel dimming** – dimming of one light colour
- **Push-pull dimming** – e.g. from warm white to cool white
- **RGB control** – manually or automatically
- **RGBW control** – RGB with an additional white channel

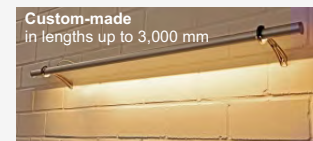
### LED luminaire “Carmen”

Slim LED luminaire made to measure

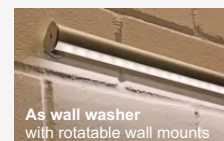
- Two power classes
- Silver-coloured or black profile
- For indoor and outdoor use
- For workplace lighting, accent lighting, illumination of advertising spaces



**IP65**



Custom-made in lengths up to 3,000 mm



As wall washer with rotatable wall mounts

### LED luminaire “VEGA”

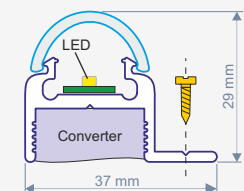
Light profile with integrated power supply unit

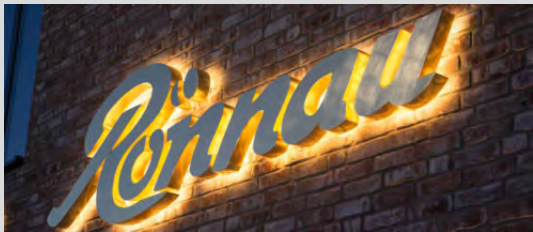
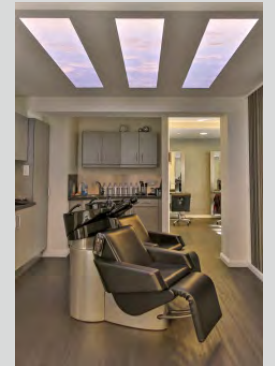
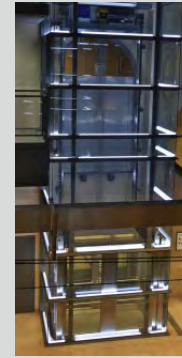
- Custom lengths up to 3,010 mm
- Silver-coloured anodized aluminium profile
- Fixing flange along one side
- For indoor and outdoor use

**IP54**



Converter integrated





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