

## Simply brighter.



# the brightest path for suspended ceilings

### SUSPENDED C E I L I N G L I G H T I N G LARSA



LARSA is a **brand new lighting system** with advanced LED technology. The **minimalist luminaire** lies camouflaged amongst its surroundings until powered on. LARSA lamps can be installed in many configurations, enabling them to meet the creative vision of the discerning designer, but also fulfil functional requirements with ease. They provide the **highest level** of lighting comfort in offices, halls and public buildings - any space that requires a contemporary look and solid lighting - while maintaining the utmost standards of energy efficiency. LARSA supports the acoustic quality of suspended ceilings and its **simplicity, minimalism** and functionality create an aesthetic and highly energy efficient alternative to other lamps.



100% designed and produced in Europe

Provides 70% energy saving compared to fluorescent raster lamps and 35% in relation to popular LED raster lamps<sup>1</sup>

**Compliments acoustic interiors** - up to 16% less noise

5-year warranty

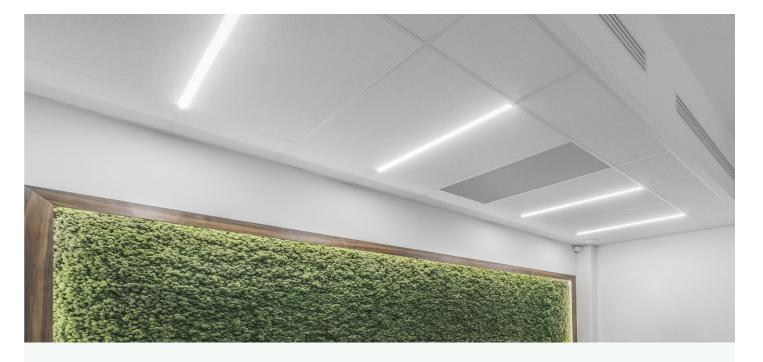


Freedom to create unique lighting patterns



Certified for use in clinical areas of hospitals and health care buildings

<sup>1)</sup> Research conducted on certified laboratory equipment with respect to the leading European manufacturers of fluorescent and LED lamps.









<sup>2)</sup> Two and a half of LARSA S60 generate light even to a standard raster luminaire with four fluorescent lamps. Analysis based on average industry electricity price for EU-28 from 2016 (0,12€ per kWh) and assumption that one lamp lights 12 hours a day.

#### ENERGY CLASS

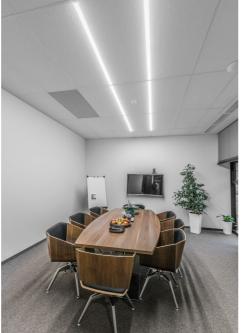
LARSA is in high energy class that brings real savings of up to €18 per year for each lamp<sup>2</sup>.







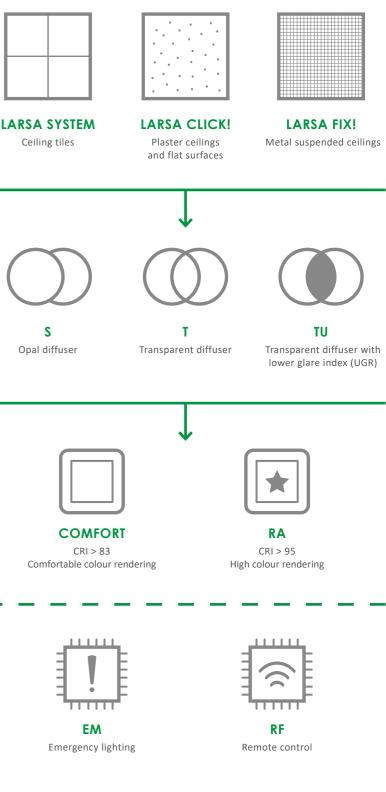




### How to choose the right lighting?

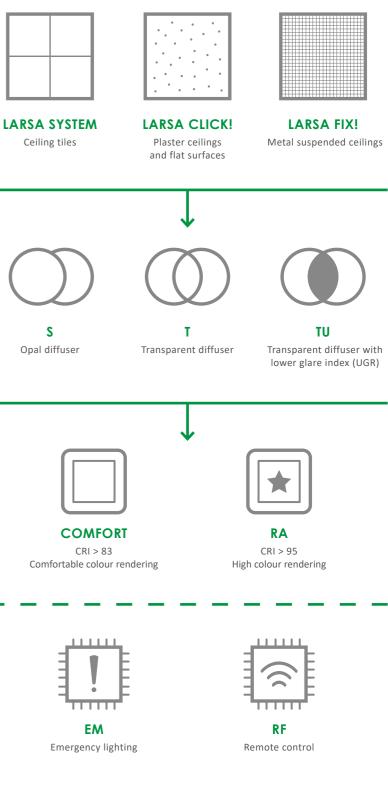
#### 1 Choose the type of ceiling

The ceiling type defines the mounting method. Depending on whether you are planning on using ceiling tiles, plaster or a metal ceiling, the method of installation will be different.



#### 2 Choose the diffuser

The opal diffuser gives a pleasant dispersion of the light, transparent diffuser gives more light in the room, and TU diffuser limits the glare.



**3** Select LEDs

Those with a higher CRI will allow you see the colours as they are in natural daylight.

4 Options

When making the decision as to which type of LARSA you will use in your project you can additionally choose the EM option with a frame that has an emergency module and / or wireless control.

If you need assistance in selecting the right product, feel free to email us at: lighting@lars.pl. Our Project Design Department is a team of lighting experts and architects who use programs such as AutoCAD, DIALux and RELux daily.

We ensure that every project **fulfills the requirements** of modern facilities while maintaining optimal energy standards and financial performance for investors.

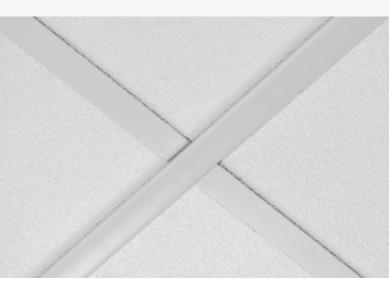


**Ceiling tiles** 

PATENTED

## LARSA SYSTEM

LARSA System is a solution that fits in with **suspended ceiling systems** of the most popular producers. Thanks to special hooks and a high back frame, it can be hung quickly and easily on the ceiling structure. Its slim profile increases the noise control in the space.



Acoustic ceilings protect people from tiring noise. However, replacing sound-absorbing panels with the classical luminaires can reduce their efficiency by **up to 16%**.



Thanks to its **low profile** and **special hooks**, the LARSA System can be installed under ventilation and fire protection systems without any problems.

#### Examples of the lighting patterns\*

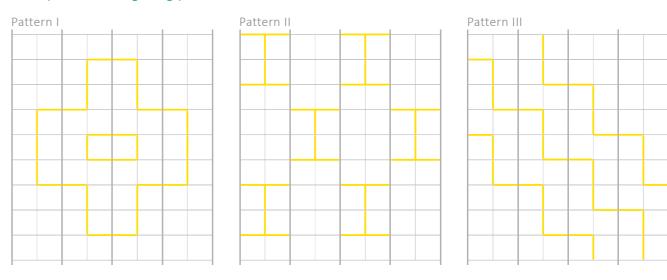
Hook

Aluminum profile

LED strip

End cap

Diffuser

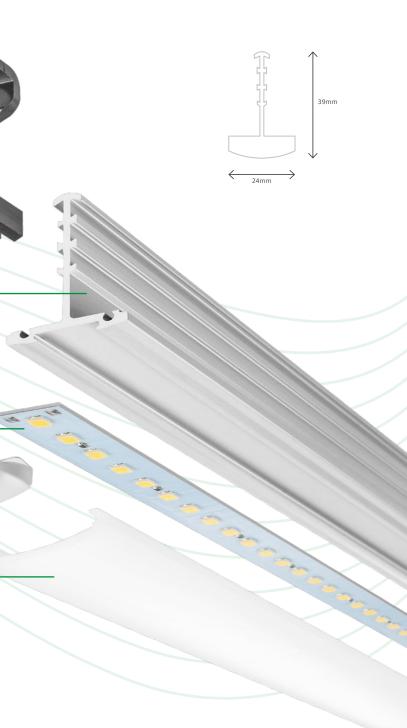


\* To create light patterns I and III, the use of LARSA 120 Half is required. It is a luminaire with a length of 120 cm, which contains LEDs on one half and a bare surfuce on the other. It hangs between the main girders.

LARSA lamps fit between the ceiling panels, optimising the control of sound and improving acoustic comfort in the space.







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Plaster ceilings and flat surfaces PATENTED

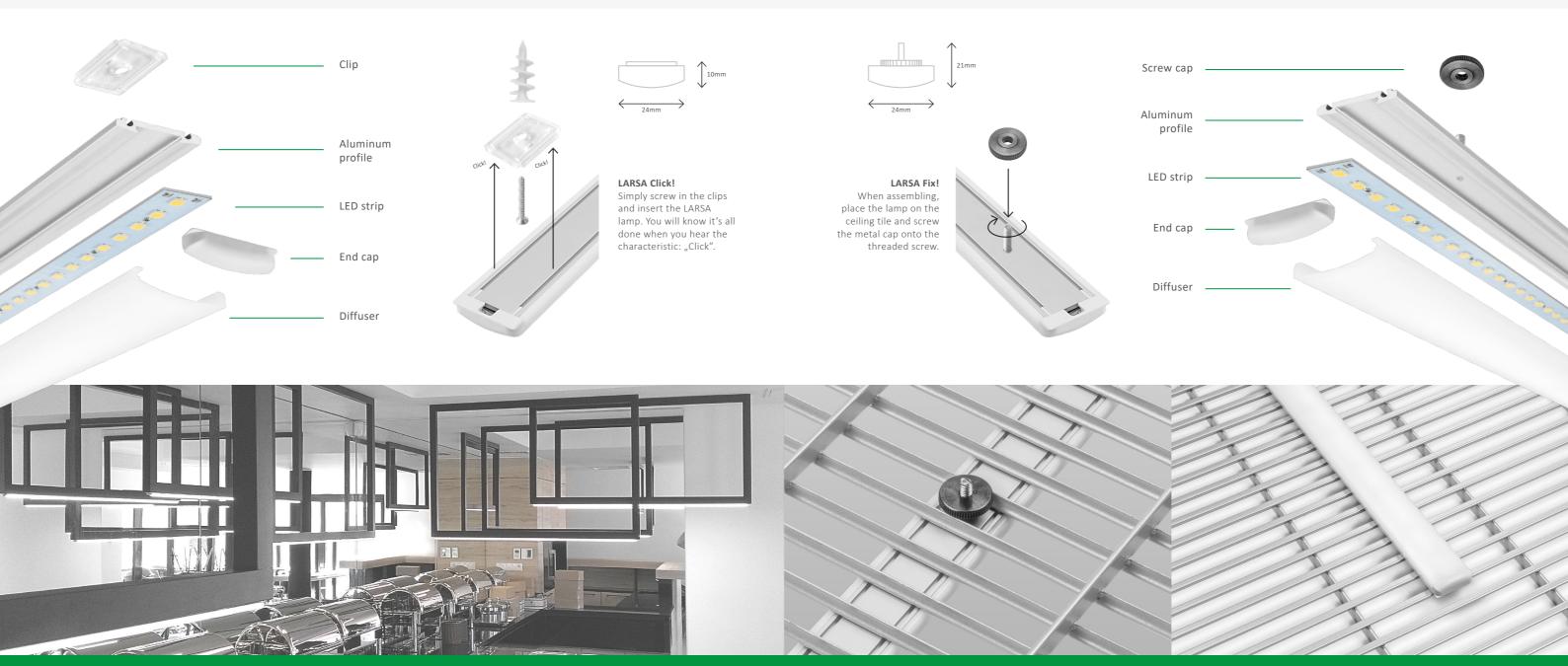
Metal suspended ceilings

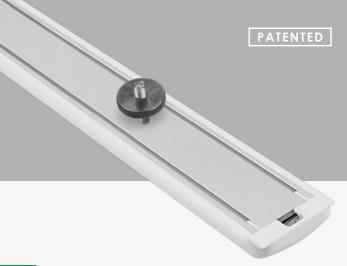
## LARSA CLICK!

LARSA Click! is a simple and effective solution for **plaster ceilings, vertical baffles and other flat surfaces**. Thanks to the high quality elements, the lamp is very lightweight, which allows to install it even in soft materials. Simply screw in the clips and insert the LARSA lamp. You will know it's all done when you hear the characteristic: "Click".



LARSA Fix! is a solution **for metal ceilings**. Uninterrupted light continuity emphasizes the purity and the form of metal. A powerful stream of light classifies it, just like the rest of the family, as the main lighting fixture.





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#### Diffusers

All LARSA lamps are available with three variants of the diffuser.

## S ()

**Standard lamp with an opal diffuser.** A functional and aesthetic solution for offices, public buildings, hotels, conference halls, hospitals and other spaces.

### $\bigcirc$

This lamp has a transparent diffuser that increases luminous efficiency by 25% <sup>3</sup>. Recommended for industrial buildings, production halls, fairs halls, sport halls, public buildings and all other spaces with high ceilings.

## TU 🛈

A lamp with transparent diffuser, with a low degree of glare (UGR). Recommended for use in shops, corridors, hospitals, homes and offices, where it is essential to reduce glare.

<sup>3)</sup> Based on laboratory tests carried out in relation to the lamp LARSA 60S.

LEDs

COMFORT or RA type LEDs can be used in all LARSA lamps



This lamp was created specifically for the printing, textile and trade industries. However, it can also be installed in dental practices and any other space where **better seeing and distinguishing of colours** is a priority. The advanced LED technology allows for **colour rendering index (CRI) over 95**.

#### Options

All LARSA lamps can be extended with additional options.

## EM 🛄

Standard luminaire with an **additional emergency module** that illuminates evacuation routes in case of power outage (batteries last up from 1 to 3 hours). The green LED continuously alerts about system activity while the minimalist design ensures the smooth surface of the ceiling is preserved.

RF

The LARSA system can be combined with any control method.

To set the intesity of light you can use a **wireless remote control**, a free smartphone app or advanced systems like **KNX, DMX** and **DALI**. This control over lighting **sections** guarantees **savings** and **diversifies patterns** on the ceiling, intensifying the "wow-factor".

Interface: DALI, KNX, DMX Smartphone: iOS, Android, Windows





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#### **Parameters**

Power

Colour

IP code

Energy class

Input voltage

Beam angle

Luminous flux

LED durability

Colour temperature

Ambient temperature range

Colour Rendering Index (CRI)

**Dimensions** 

Colour Rendering Index (CRI) LARSA RA

Controls and dimming

LARSA 60 S **LARSA 120 S** 10 W 20 W 24 VDC (SELV) 24 VDC (SELV) 140° 140° Neutral white Neutral white 4000 K 4000 K 1050 lm 2100 lm 50.000 h 50.000 h From 0°C to 40°C From 0°C to 40°C <95 Humidity (without condensation) <95 Yes Yes IP40 IP40

83

>95

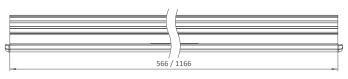
A+

All LARSA lamps are available in two standard dimensions 60cm and 120cm.

CE
PG
RoHS

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#### LARSA System 60 / 120



#### LARSA Click! 60 / 120







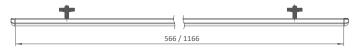
576 / 1176

83

>95

A+

#### LARSA Fix! 60 / 120







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