

### Light in the outdoor area

Lighting art in outdoor spaces perfectly



Be it the sculpture garden of a museum, an exhibit in a private outdoor area or an artwork in a public park: bring outdoor art to life at night and create unique visitor experiences. Each work of art is individual and requires different lighting strategies and lighting tools for perfect display. ERCO offers robust luminaires for outdoor areas with the lighting technology of museum lighting. Exciting lighting concepts can be implemented thanks to an extensive diversity of light distributions, excellent colour rendering and precise optics: ranging from dramatic accentuation to uniform floodlighting and suitable for all types of art outdoors. We offer you helpful tips on which ERCO lighting tools are best suited and what you should pay attention to when illuminating art in outdoor areas.

For more projects, see: www.erco.com/outdoor-art

### Lighting art in outdoor spaces perfectly Exciting projects





#### Illuminating uniformly

An equestrian sculpture becomes a focal point in front of the Chimei Museum, illuminated from the side by mastmounted floodlights.

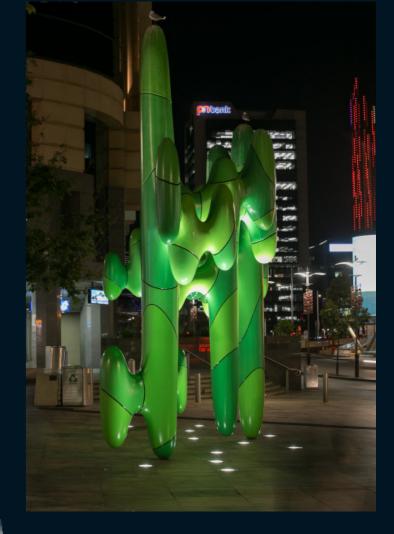
Architect: Y.C.T Architects & Associates. Interior design: U-Joint Design Construction Co. Ltd. Lighting designers: Chou

Lien, Ray Chen (OLDC). Electrical engineering: EAK Engineering Consult-ants & Technology Co., Ltd. Photographer: Jackie Chan.

### Displaying art

High-precision ERCO Tesis ground-recessed lumi-naires display 'The Cactus' in the heart of Perth, Australia. The result is a unique focal point in the nocturnal cityscape.

Photography: Matthew Devlin, Perth.







### Creating attention

A Beamer projector illuminates the stone impressively from above to give it a high attention factor on the forecourt of the Rheinisches Landesmuseum.

Architect: Loher, Herrmann, Pfeil, Bosch, Stuttgart.



### Precisely illuminating

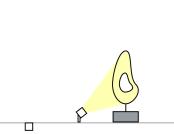
Thanks to precise illu-mination of the column with Lightscan projectors, the colourful design is clearly visible even in the

Jokhang Temple, Dazhao Temple. Lighting designers: School of Architecture, Tsinghua University, Zhang Xin Lighting Studio. Photographer: Jackie

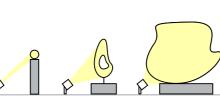


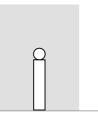
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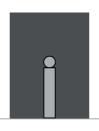
What you should know





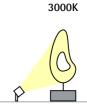




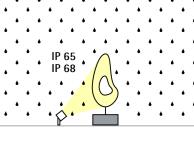












### Which luminaire is the right one?

Projectors and floodlights as well as ground-recessed luminaires are suitable for lighting art installed in outdoor spaces. Floodlights and projectors can be flexibly positioned on walls or masts, but also on the ground using a ground stake. Ground-recessed luminaires on the other hand are fixed but inconspicuously integrated into the ground. They can be walked over by visitors, and vehicles can also drive over them if they are fitted with appropriate mounting enclosures.

## Select the light distribution matching the exhibit

ERCO lighting tools feature up to seven different light distributions. Narrow distributions such as spot (approx. 15°) are ideal for accentuating. For smaller exhibits or at large lighting distances, narrow spot distribution (approx. 8°) is optimal. Oval beam angles such as oval flood (approx. 20° x 60°) are excellent for lighting elongated sculptures.

# How brightly should works of art be illuminated in outdoor spaces?

Accent lighting outside creates appealing points of interest. The contrast in brightness to the surroundings emphasises the presence of the exhibits. A ratio of 1:5 to 1:10 is recommended as a contrast between the surroundings and the exhibit. If a museum facade in the background has an illuminance of 50lx, the exhibit in the foreground should have around 250lx for accenting purposes.

### Select precisely alignable luminaires

Correct alignment of the light beam onto the exhibit is crucial for high visual comfort. For this reason projectors and floodlights have pan-and-tilt adjustment. An adjustment aid on the housing makes it possible to identically align several projectors and floodlights. Ground-recessed luminaires, as directional spotlights, also feature pan-and-tilt alignment for precise, impressive lighting.

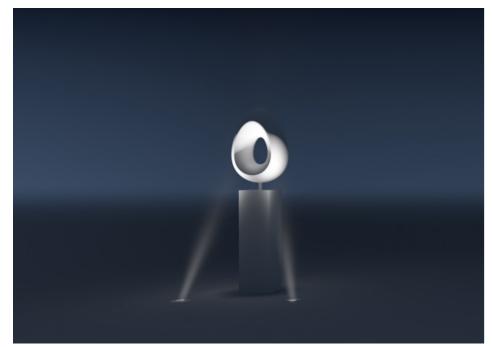
### Correct use of light colours

The colour of light has a significant influence on the perception of art. Warm light colours such as 3000K are suitable for warm-toned materials such as wood, whilst cool light colours such as 4000K are better for surfaces with a cooler feel, such as steel and aluminium. Using coloured light from RGBW luminaires, the surroundings can be designed and transformed with either subtle or dramatic contrasts.

### Design with weather resistant luminaires

All ERCO outdoor luminaires have at least an IP65 protection rating. This means they are dustproof and protected against jets of water from all directions. The housing is made of corrosion-resistant cast aluminium with double powder coating and is therefore particularly weather-resistant. Ground-recessed luminaires have an IP68 protection rating. This means these luminaires are also protected against the consequences of continuous immersion in water.

#### How to impressively display your art



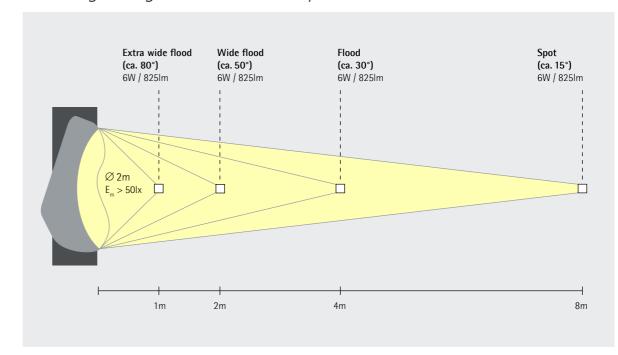


Accent lighting strikingly and impressively models sculptures. For illumination from three sides, an arrangement ( $\beta$ ) with luminaires each offset by 120° is suitable. For a nuanced lighting level, a distinction is made between main light, fill-in light and back light. Arrangement:  $\alpha = 30^\circ$ ,  $\beta = 120^\circ$ 

Tip: To illuminate an approx. 2m large sculpture installed on a pedestal from a distance of 8m with >50lx, a projector with 6W LED module and spot light distribution (approx. 15°) is needed.

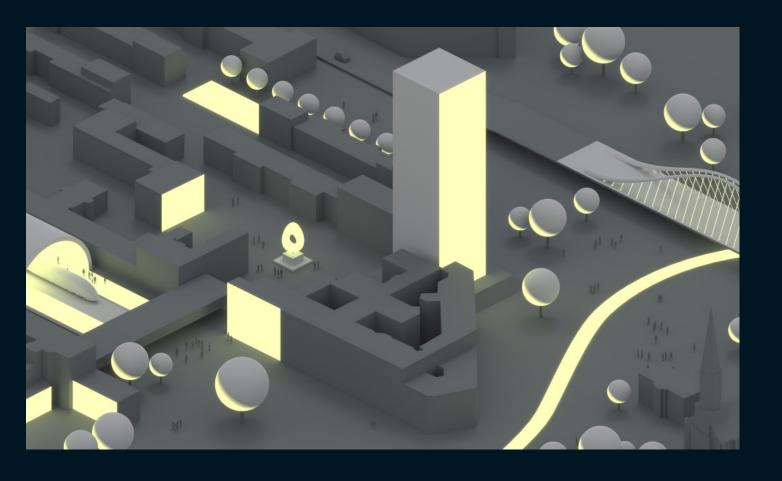
Further lighting methods and planning aids can be found on the web at www.erco.com/outdoor-art

#### Selecting the right luminaire for any distance



A short lighting distance to the exhibit requires wide light distribution Narrower light distribution is needed with increasing distance to avoid spill light to the left and right of the exhibit. To achieve 50lx on the exhibit, a 12W LED module is sufficient at a distance of 3m and 24W at 20m. Stay flexible: interchangeable light distributions enable you to adapt the lighting to different exhibits at any time

## **Light** is the fourth dimension of architecture



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