

In urban environments, light promotes public life at night. Cultural institutions, shops and businesses benefit from a lively nightlife. Impressive facade lighting makes buildings visible in the urban space and enables orientation. The uniform illumination of facades serves to emphasise landmarks and gives them a calm presence in the urban space. Light accents on the other hand structure large surfaces and highlight architectural details such as columns and cornices. Grazing light wallwashing is ideal with facades for highlighting the fine textures of timber and natural stone to create striking reliefs. To avoid light pollution, good glare control and precise photometrics are important factors when selecting luminaires. We give you tips on how to strikingly illuminate facades in unison with the needs of both people and the environment.

For more projects, see:  
[www.erco.com/outdoor-facades](http://www.erco.com/outdoor-facades)



## Lighting facades perfectly Exciting projects



### Bridging distances

High-output Lightscan projectors illuminate the facades of Milan Cathedral with high uniformity from close up and from large distances.

Lighting design: Ferrara Palladino Lightscape, Pietro Palladino.  
Photography: Timm Lange.



### Emphasising surfaces

Vertical illumination is simply and precisely implemented with pivotable Focalflood facade luminaires. Grazing light strikingly emphasises the surface structure and wide light distributions allow large spacings between the luminaires.

Lighting design: Inwhite Ljusmiljö AB, Norrköping.



### Accenting facades

Ground-recessed luminaires emphasise landmarks with wide light distribution and uniform accentuation. Simple alignment of the light beam with use of pivotable luminaires avoids spill light at the Argentine Republic National Library.

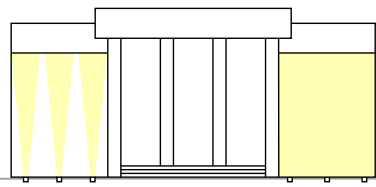
Architecture: Clorindo Testa, Francisco Bullrich, Alicia Cazzaniga. Lighting design: Estudio Juan Altgelt & Asociados. Photography: Alejandro Wirth.





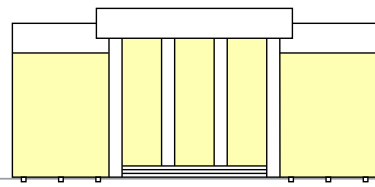
# Lighting facades perfectly

What you should know



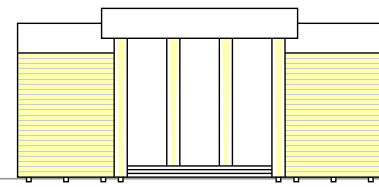
## From accenting to flood-lighting: Select the right light distribution

ERCO offers luminaires for outdoor applications with up to seven different light distributions. Selection ranges from very narrow to wide light distributions. In this way a wide variety of lighting concepts can be implemented: From the precise accentuation of small facade details with narrow light distributions to the uniform floodlighting of large buildings.



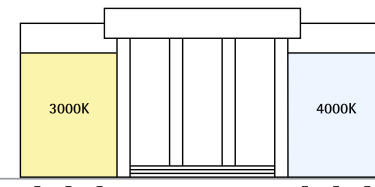
## How to uniformly illuminate a complete facade

Wallwashing illuminates facades uniformly and emphasises the overall dimensions of the architecture. A major advantage in the design of urban spaces is that a vertical surface creates a high impression of brightness even with low illuminance. For efficient wallwashing with large spacing between luminaires, ERCO features specialised luminaires with wallwash light distribution in many of its product ranges.



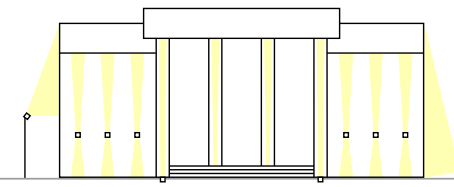
## Model the structure of the facade with grazing light

Another method of wallwashing is grazing light. The light hitting the facade at a very shallow angle emphasises the structure of the facade's surface. Grazing light is particularly effective on historical facades with structured surfaces and reliefs. Facade luminaires and ground-recessed luminaires are ideal for this purpose.



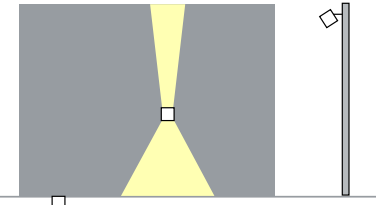
## Correct use of light colours and contrasts

Different light colours enhance the nuanced nature of materials. Warm light colours such as 3000K are suitable for warm-toned construction materials such as wood, whilst cooler light colours such as 4000K are more suitable for cooler surface colours such as exposed concrete. Different levels of illuminance also support differentiation of the facade elements. To render accents visible we recommend a brightness ratio to the general lighting of 1:5 to 1:10.



## Pay attention to the correct handling of light

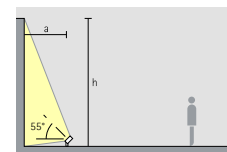
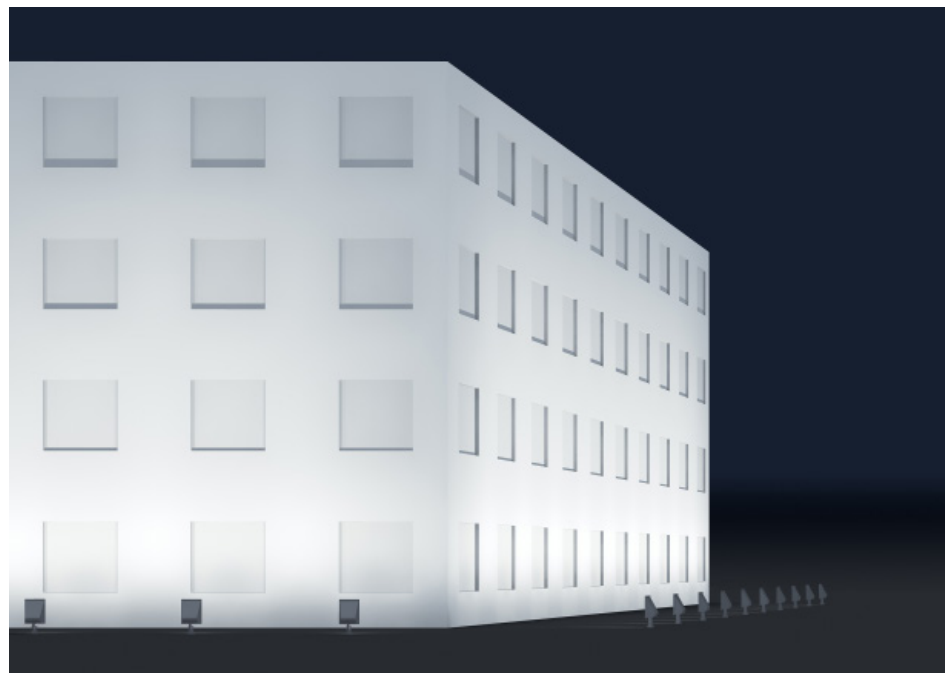
Sustainable lighting solutions and ecologically exemplary applications are important in outdoor areas. ERCO luminaires make a significant contribution to this thanks to precise optics and excellent glare control. To completely avoid light pollution, we recommend that you ensure luminaires are correctly aligned so that no light shines into the sky. The right brightness also helps to protect the environment. This is why our luminaires for outdoor applications are dimmable.



## Ground, building or mast

ERCO offers various types of luminaire that illuminate facades from below, above, near or far. Ground-recessed luminaires are a very elegant solution for illuminating facades from the ground. Facade luminaires on the other hand function as a discreet design element on the building and create a magical form of grazing light. Projectors, floodlights and wallwashers can be mounted in almost any location: on the ground, on the facade, on bollards and on high masts.

## Wallwashing for small to large facades



Wallwashers create a very uniform distribution of light on the facade and make it appear flat. The distance to the wall should be about one third of the facade height for this purpose. This results in an inclination angle of approx. 55°. For good longitudinal uniformity, the spacing between luminaires can be up to 1.2 times the distance to the wall.

Tip: With a wide arrangement of 1:1.25 we recommend wallwashers with a 48 watt LED module to uniformly illuminate a facade with a height of 12m from a distance of 4m with approx. 50lx.

Further lighting methods and planning aids can be found on the web at [www.erco.com/outdoor-facades](http://www.erco.com/outdoor-facades)

## Durable luminaires for low-maintenance operation



Conventional LED lighting after 20,000h

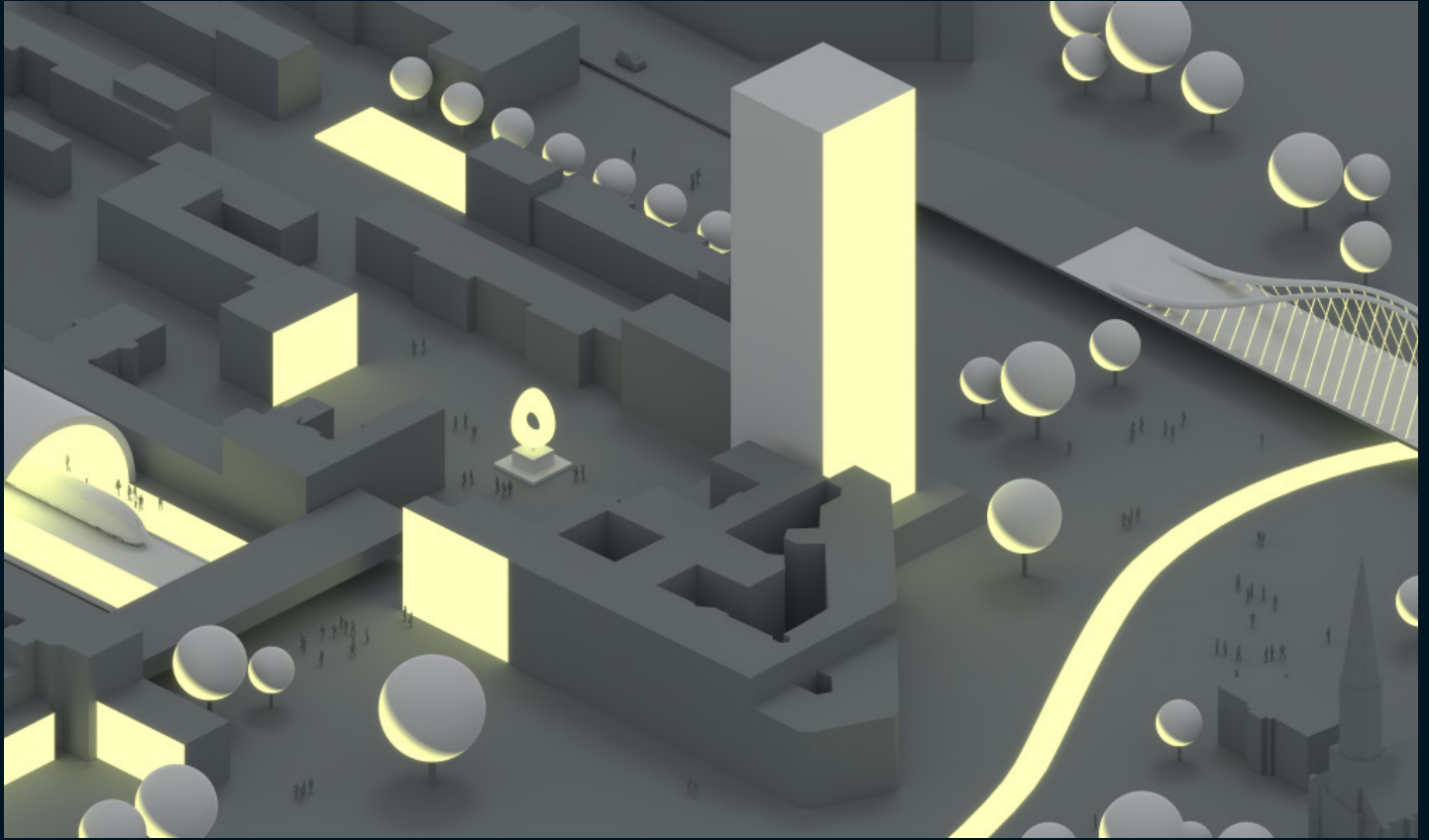
For a standard LED module with a failure rate of 0.2% of LED modules per 1,000h, with 50 luminaires installed, the failure of two luminaires after only 20,000h must be expected.



ERCO LED lighting after 20,000h

Comparing an ERCO high-power LED with a standard LED demonstrates the positive effect of high-performance LEDs on investment costs. ERCO LEDs feature a failure rate of 0.1% at up to 50,000 hours of operation. Several LEDs are installed in one ERCO LED module. This means that ERCO luminaires continue to operate without problems after 20,000 hours.

**Light** is the fourth dimension  
of architecture



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