

Tesis square – The benchmark in the outdoor area

An innovative archetype in outdoor lighting

Tesis has long been a regular feature in the outdoor range. In a completely upgraded version, it now delivers an entirely new level of performance. Innovative photometrics ensure maximum brilliance and efficiency. A considerably flatter housing thanks to LED technology ensures exceptionally straightforward installation – in both round and square version. The robust polymer housing is fully corrosion-resistant and designed to ensure long life and ease of use. Be it directional luminaire, uplight

or wallwasher, Tesis sets the benchmark in outdoor lighting.





Structure and characteristics

The features described here are typical of products in this range. Special versions may offer additional or varying features. A comprehensive description of the features of individual products can be found on our website.

1 ERCO Spherolit lens

- Directional spotlight light distributions: narrow spot, spot, flood or oval flood
 - Uplight light distribution: wide flood
- or

Lens wallwasher

- Optical cut-off 40°
- ERCO lens system: wallwash
- Wallwasher reflector: Metal or polymer, aluminised, silver, textured, partially coated black, with diffuser on lower side

2 ERCO LED-module

- High-power LEDs: warm white (3000K) or neutral white (4000K)
- Collimating lens made of optical polymer
- Directional spotlight pivotable through 0°-30°

3 Cover frame

- Covered or flush mounting detail
- Stainless steel
- Safety glass: 15mm, transparent

4 Housing

- Polymer, black
- Longitudinally watertight cable 3x1.5mm²
- Installation with separate connection sleeve
- Mounting is possible without mounting enclosure
- Installation in mounting enclosure: driveable, can be driven over by vehicles with air-filled tyres. Load 20kN or 50kN
- Hollow floor installation only with overlapping installation detail: Fixing set to be ordered separately

5 Control gear

- Switchable, phase dimmable or DALI dimmable
- Phase dimmable version: Dimming with external dimmers possible (trailing edge)

Protection mode IP68

Protection against the ingress of dust, protection against the consequences of continuous immersion in water to a depth of max. 3m.

Variants on request

- High-power LEDs: 3000K CRI 97 or 2700K, 3500K, 4000K with CRI 92
 - Cover frame: V4A stainless steel
 - Anti-slip safety glass
- Please contact your ERCO consultant.



Design and application:
www.erco.com/tesis-square

Tesis square In-ground luminaires











Improved visual comfort
 ERCO has developed luminaires with special housing designs and highquality optical components specifically for demanding visual tasks to provide enhanced visual comfort.







Available in round or square
 The ERCO system design includes round and square versions to provide luminaires suited to the architecture and surroundings.




Large luminaire spacing
 For some wallwashers, the luminaire spacing may be up to 1.5 times the offset from the wall. Corresponding details are provided in the wallwasher tables in the catalogue or the product data sheets. Computerised beam calculations are recommended to check potential intersections with side walls.

Special characteristics

-  Improved visual comfort
-  Available in round or square
-  Wide luminaire spacing with wallwashing

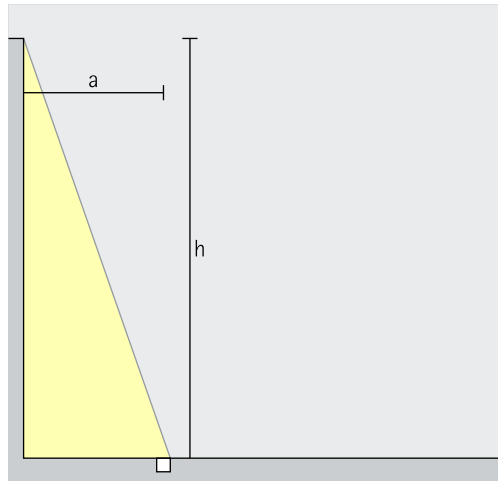
-  ERCO high-power LEDs
-  Efficient Spherolit technology
-  Optical cut-off 40°
-  Different light distributions
-  Different light colours

-  Excellent thermal management
-  EMC-optimised
-  Various construction sizes
-  Flush or covered mounting detail
-  Protection mode IP68
-  Safety class II

-  Switchable
-  Phase dimmable
-  DALI dimmable

Tesis square In-ground luminaires – Luminaire arrangement

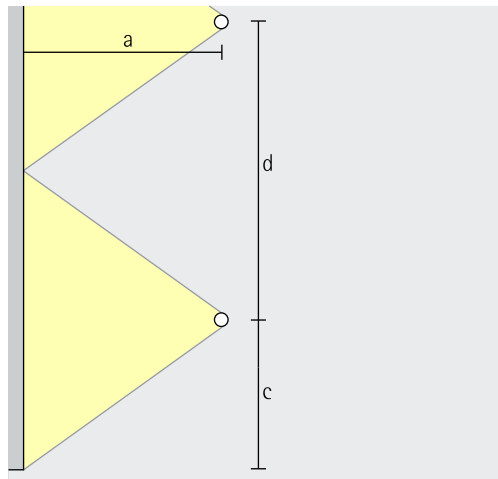
Lens wallwashers Wallwash



Wallwashing

Uniform vertical illuminance in the outdoor area defines spatial borders. Here, the distance (a) of Tesis lens wallwashers from the wall should be around one third of the room height (h).

Arrangement: $a = 1/3 \times h$

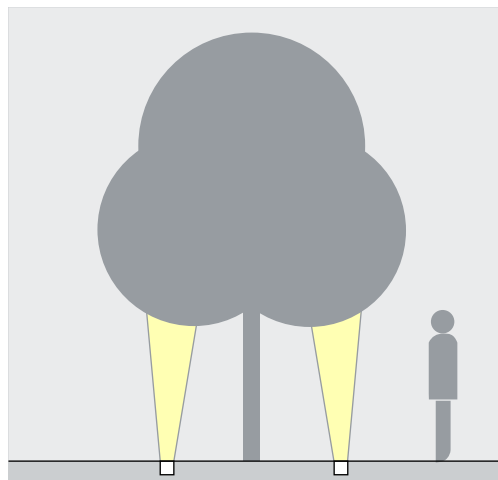


For good longitudinal uniformity, the spacing (d) of round Tesis lens wallwashers may be up to 1.3 times the offset from the wall (a).

Arrangement: $d \leq 1.3 \times a$

The optimal wall offset and luminaire spacing for each product are indicated in the wallwasher tables in the catalogue and the product data sheets.

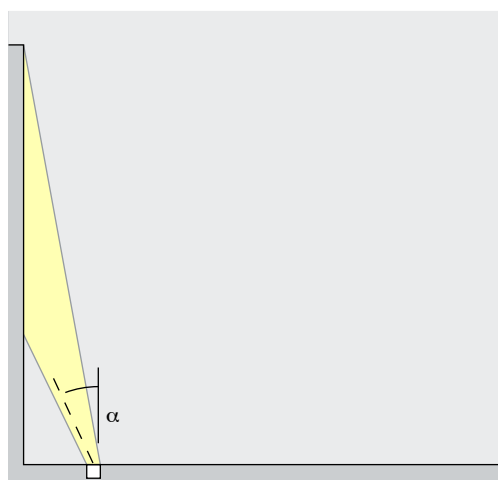
Uplights Wide flood



Accentuation

Tesis uplights used for the accentuation of objects such as treetops or cantilever roofs need to be accurately positioned and aligned to ensure that the light arrives precisely and only on the target surface to avoid light pollution.

Directional luminaires Narrow spot, Spot, Flood, Oval flood



Accentuation

Experience has shown the ideal angle of tilt (α) for accent lighting with Tesis directional luminaires to be 25°. This ensures good modelling without excessive grazing light.

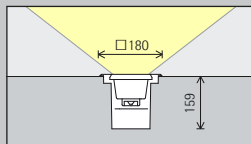
Arrangement: $\alpha = 25^\circ$

Ljusslingan, Stockholm / Sweden.
Photography:
Johan Elm, Stockholm.



Tesis square In-ground luminaires

Construction size Size 3



LED module
Maximum value
at 4000K CRI 82

8W/1100lm

Light colour

	2700K CRI 92 *		3500K CRI 92 *
	3000K CRI 92		4000K CRI 82
	3000K CRI 97 *		4000K CRI 92 *

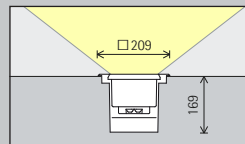
Light distribution

Lens wallwashers	
	Wallwash
Uplights	
	Wide Flood

Control

	Switchable
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Construction size Size 4



16W/2200lm	2W/275lm (Narrow spot)
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	2700K CRI 92 *		3500K CRI 92 *
	3000K CRI 92		4000K CRI 82
	3000K CRI 97 *		4000K CRI 92 *

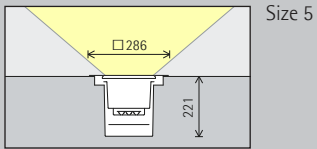
Lens wallwashers		Directional luminaires	
	Wallwash		Narrow spot
Uplights			Spot
	Wide Flood		Flood
			Oval flood

	Switchable
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	DALI
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Accessories

	Connection sleeve		Recessed housing
	Branching sleeve		Mounting kit



4W/550lm (Narrow spot)

24W/3300lm

	2700K CRI 92 *		3500K CRI 92 *
	3000K CRI 92		4000K CRI 82
	3000K CRI 97 *		4000K CRI 92 *

	2700K CRI 92 *		3500K CRI 92 *
	3000K CRI 92		4000K CRI 82
	3000K CRI 97 *		4000K CRI 92 *

Directional luminaires	
	Narrow spot

Lens wallwashers		Directional luminaires	
	Wallwash		Spot
Uplights			Flood
	Wide Flood		Oval flood

	Switchable
	DALI

	Phase dimmable
	DALI

* available on request

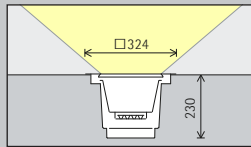
Article numbers and planning data:
www.erco.com/018336

Design and application:
www.erco.com/tesis-square



Tesis square In-ground luminaires

Construction size









Size 7







LED module
Maximum value
at 4000K CRI 82

32W/4400lm	8W/1100lm (Narrow spot)
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Light colour

	2700K CRI 92 *		3500K CRI 92 *
	3000K CRI 92		4000K CRI 82
	3000K CRI 97 *		4000K CRI 92 *





Light distribution

Lens wallwashers		Directional luminaires	
	Wallwash		Narrow spot
	Uplights		Spot
	Wide Flood		Flood
			Oval flood

Control

	Phase dimmable
	DALI

Accessories

	Connection sleeve		Recessed housing
	Branching sleeve		Mounting kit



Bus station, Blackburn. Architecture: Capita Symonds – Altaf Master. Photography: Lukas Palik, Düsseldorf.

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