

# Tesis New – The benchmark in the outdoor area

## **An innovative archetype in outdoor lighting**

Tesis, which has long been an integral part of the ERCO programme, has reached a new level of performance following intensive further development. Its lighting technology convinces with maximum brilliance and efficiency. The robust, corrosion-free polymer housing ensures durability and easy handling. Whether directional spotlights with interchangeable lenses and zoom light distributions, uplights or wallwashers – 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 lenses

- made of optical polymer
- Spherolit lenses: narrow spot, spot, flood, wide flood or oval wide flood
- Zoom lenses: zoom spot or zoom oval; infinitely variable focus

or

### Lens wallwashers

- Wallwasher reflector: polymer, aluminium vaporised, silver

### 2 ERCO LED-module

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

### 3 Cover ring

- Covered or flush mounting detail
- Stainless steel
- Protective glass: flush, 15mm, clear

or

### Cover (semi-recessed)

- Graphit m
- Polymer, coated
- Protective glass

### 4 Housing

- Polymer, black
- Longitudinally watertight connection cable
- Installation with separate connection sleeve
- Mounting without installation housing possible
- Mounting in recessed housing (luminaires with flush protective glass): can be driven on and rolled over by vehicles with air-filled tyres. Load 20kN or 50kN
- Hollow floor installation only with overlapping installation detail: order mounting set separately

### 5 Control gear

- DALI dimmable

### 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 ring: V4A stainless steel
  - Anti-slip safety glass
- Please contact your ERCO consultant.



Design and application:  
[www.erco.com/tesis-new](http://www.erco.com/tesis-new)



# Tesis New In-ground luminaires












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



**Outstanding uniformity**  
 To meet the stringent standards of vertical illuminance, ERCO has developed luminaires specifically to produce exceptionally uniform levels of illuminance.

**Special characteristics**

-  Improved visual comfort
-  Wide luminaire spacing with wallwashing

-  ERCO high-power LEDs
-  Efficient Spherolit technology
-  Different light distributions
-  Different light colours

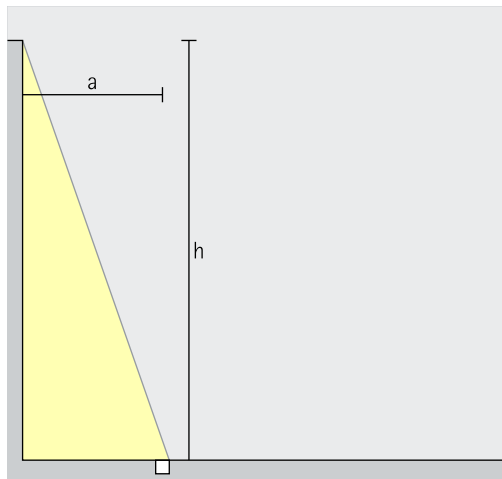
-  Excellent thermal management
-  EMC-optimised
-  Various construction sizes
-  Flush or covered mounting detail
-  Safety class II

-  Switchable
-  DALI dimmable

# Tesis New In-ground luminaires – Luminaire arrangement

## Recessed wallwashers

Wallwash

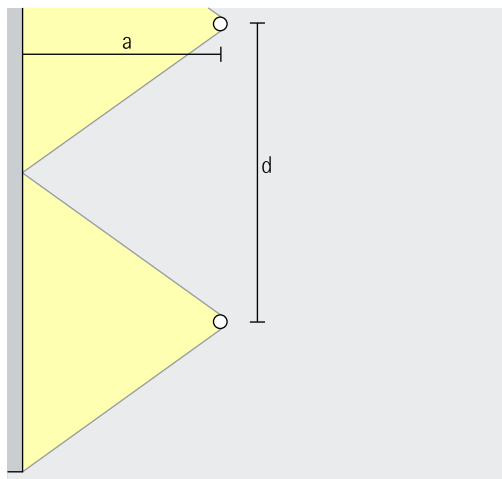


### Wallwashing

Tesis wallwashers offer exceptional uniformity on vertical surfaces. Lens wallwashers are the right choice for flush mounting in the floor. Semi-recessed wallwashers allow installation particularly close to the wall.

The distance of Tesis lens wallwashers to the wall (a) should be about one third of the room height (h).

Arrangement for recessed wallwashers:  $a = 1/3 \times h$

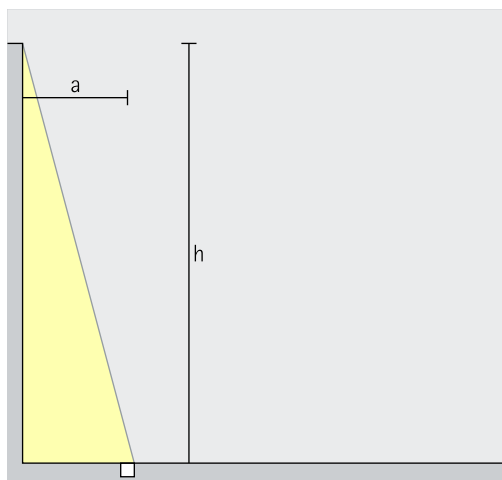


For good linear uniformity, the distance (d) between Tesis lens wallwashers can be up to 1.3 times the distance to the wall (a).

Arrangement for recessed wallwashers:  $d \leq 1.3 \times a$

## Semi-recessed wallwashers

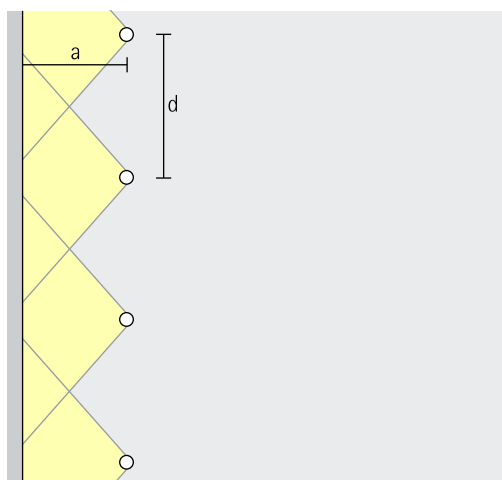
Wallwash



### Wallwashing

For semi-recessed wallwashers, a minimum wall distance (a) of around 1/6 of the room height is sufficient.

Arrangement for semi-recessed wallwashers:  $a = 1/6 \times h$



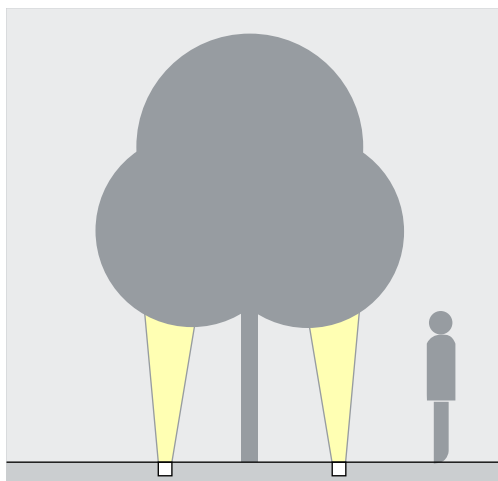
For good longitudinal uniformity, the distance (d) between semi-recessed wallwashers may be up to 6 times the distance to the wall (a).

Arrangement for semi-recessed wallwashers:  $d \leq 6 \times a$

# Tesis New In-ground luminaires – Luminaire arrangement

## Uplights

Spot, Flood, Wide flood, Oval flood

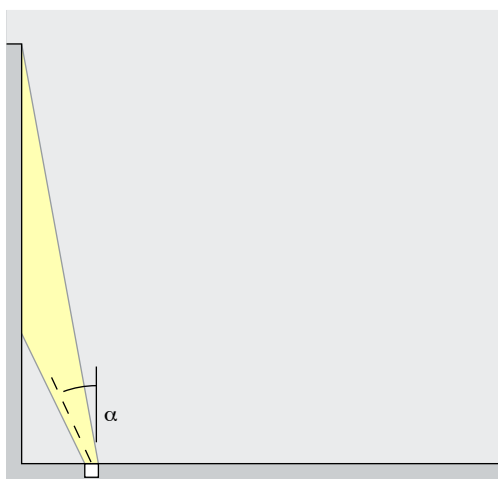


## Accentuation

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



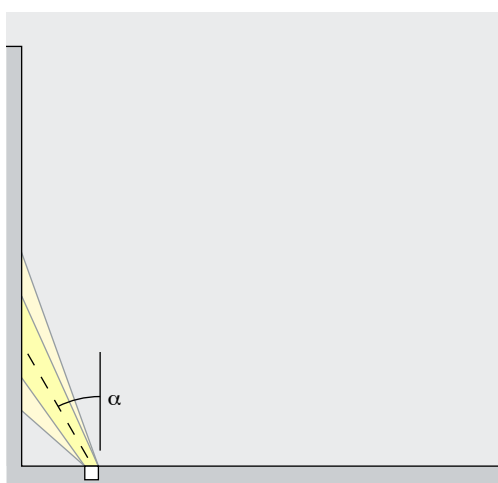
## Accentuation

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

Arrangement:  $\alpha = 25^\circ$

## Zoom directional luminaires

Zoom spot, Zoom oval



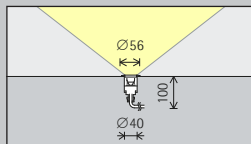
## Accentuation

Zoom directional luminaires feature a continuously adjustable beam angle. With the spot to wide flood zoom range, smaller objects can be accentuated effectively at an inclination angle ( $\alpha$ ) of about 30°. Oval zoom is suitable for linear-shaped objects to model the object without distorting the effect as a result of excessive shadowing. This set-up also prevents shadows cast by the observer.

Arrangement:  $\alpha = 30^\circ$

# Tesis New In-ground luminaires

Construction size Size 2



LED module  
Maximum value at 4000K CRI 82

3.1W/369lm

Light colour

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

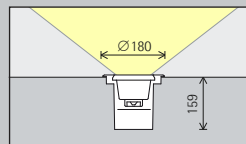
Light distribution

Recessed wallwashers	
	Wallwash
Uplights	
	Spot
	Flood
	Wide flood
	Oval flood

Control

	Switchable
	DALI

Construction size Size 3



8.1W/1048lm

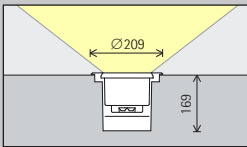
	2700K CRI 92 *		3500K CRI 92 *
	3000K CRI 92		4000K CRI 82
	3000K CRI 97 *		4000K CRI 92 *

Recessed wallwashers	
	Wallwash
Uplight	
	Wide Flood

	DALI
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Accessories










	Connection sleeve		Recessed housing		Installation unit
	Branching sleeve		Mounting kit		

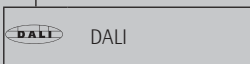


Size 4

16.2W/2096lm	4.2W/470lm (Narrow spot)
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	2700K CRI 92 *		3500K CRI 92 *
	3000K CRI 92		4000K CRI 82
	3000K CRI 97 *		4000K CRI 92 *

Recessed wallwashers		Directional luminaire	
	Wallwash		Narrow spot
Semi-recessed wallwashers			Spot
	Wallwash		Flood
Uplights			Oval flood
	Wide flood	Zoom directional luminaires	
			Zoom spot
			Zoom oval



\* available on request

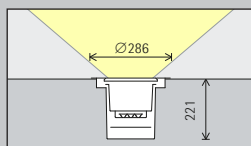
Article numbers and planning data:  
[www.erco.com/029735](http://www.erco.com/029735)

Design and application:  
[www.erco.com/tesis-new](http://www.erco.com/tesis-new)

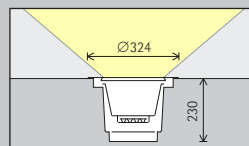


# Tesis New In-ground luminaires

Construction size



Size 5



Size 7

LED module  
Maximum value  
at 4000K CRI 82

24.3W/3144lm	4.2W/470lm (Narrow spot)
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32.3W/4192lm	12.6W/1410lm (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 *

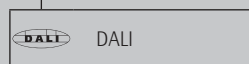
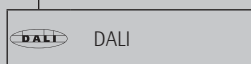
	2700K CRI 92 *		3500K CRI 92 *
	3000K CRI 92		4000K CRI 82
	3000K CRI 97 *		4000K CRI 92 *

Light distribution

Recessed wallwashers		Directional luminaire	
	Wallwash		Narrow spot
			Spot
			Flood
	Uplights		Oval flood
	Wide flood	Zoom directional luminaires	
			Zoom spot
			Zoom oval

Recessed wallwashers		Directional luminaire	
	Wallwash		Narrow spot
	Semi-recessed wallwashers		Spot
	Wallwash		Flood
	Uplights		Oval flood
	Wide flood	Zoom directional luminaires	
			Zoom spot
			Zoom oval

Control



Accessories

	Connection sleeve		Recessed housing		Installation unit
	Branching sleeve		Mounting kit		



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More precise than  
ever: The new  
generation of in-  
ground luminaires.  
Visualisation:  
Electric Gobo