

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 flood
- Zoom lenses: Zoom spot; 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

Variants on request

- High-power LEDs: 3000K 97 or 2700K, 3500K with CRI 92
- Cover ring: V4A stainless steel
- Anti-slip safety glass
- Semi-recessed wallwashers: Accessories for hollow floor installation

Please contact your ERCO consultant.



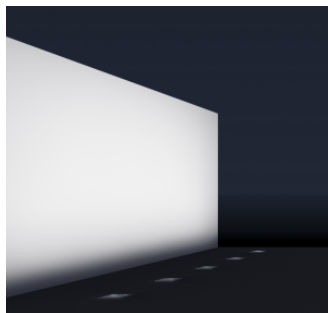
Design and application:
www.erco.com/tesis-new

Tesis New 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.



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.



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



Outstanding uniformity



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

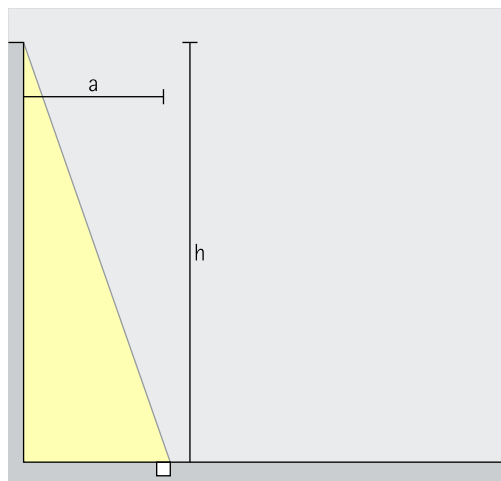


DALI dimmable

Tesis New In-ground luminaires – Luminaire arrangement

Recessed wallwashers

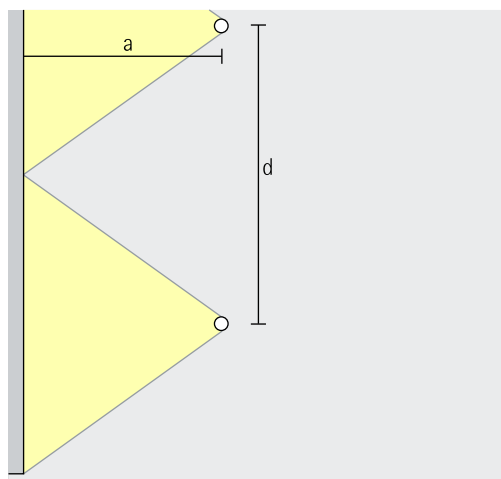
Wallwash



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: $a = 1/3 \times h$

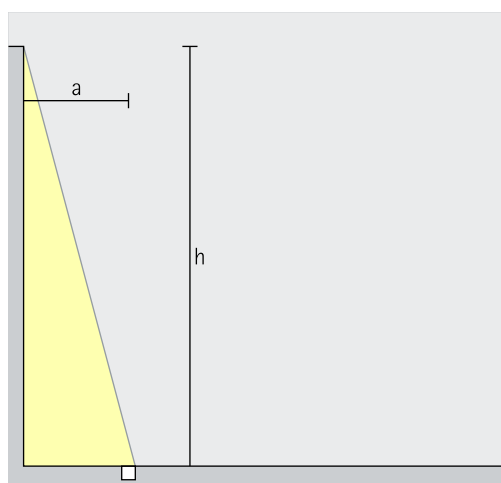


For good linear uniformity, the distance (d) between Tesis lens wallwashers can be up to 1.3 times the distance to the wall (a).

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

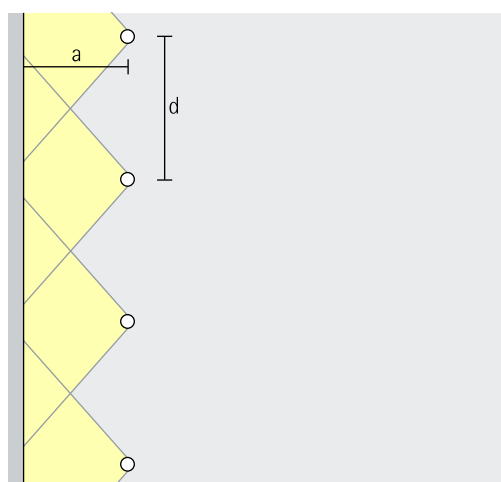
Semi-recessed wallwashers

Wallwash



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

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



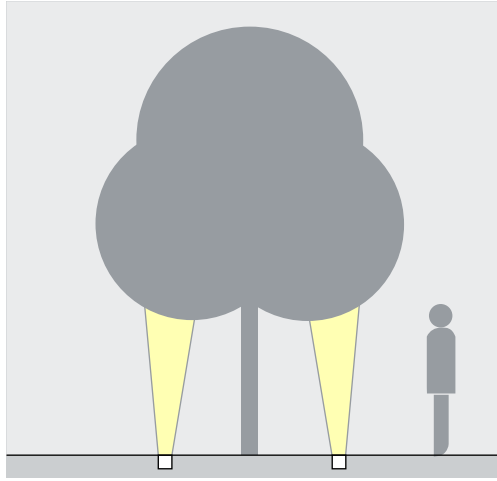
For good longitudinal uniformity, the distance (d) between semi-recessed wallwashers may be up to 6 times the distance to the wall (a).

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

Tesis New In-ground luminaires – Luminaire arrangement

Uplights

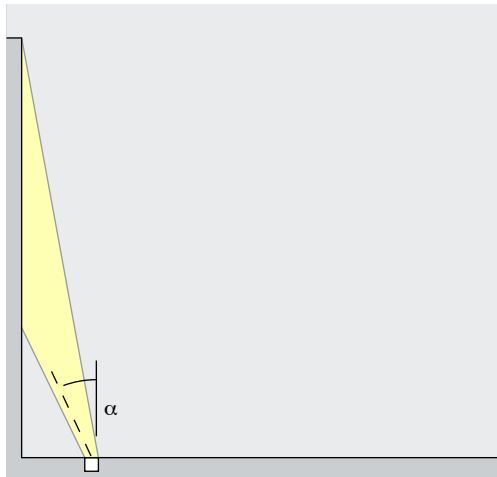
Spot, Flood, Wide flood, Oval flood



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

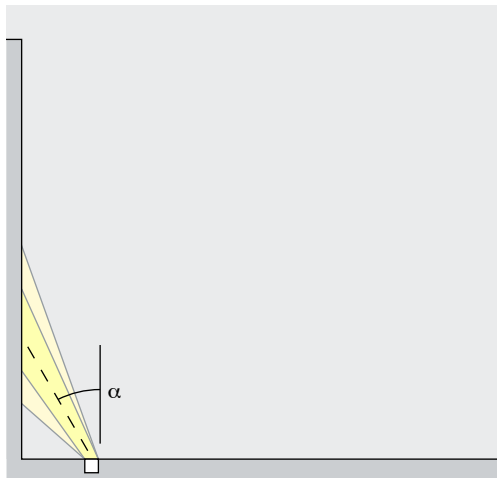


Experience has shown the ideal angle of tilt (α) for accent lighting with Tesis directional luminaires to be 25° . This ensures good modelling without excessive grazing light.

Arrangement: $\alpha = 25^\circ$

Zoom directional luminaires

Zoom spot

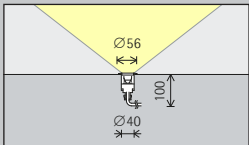


Zoom directional luminaires feature a continuously adjustable beam angle. With the spot to wide flood zoom range, smaller objects can be accentuated effectively at an inclination angle (α) of about 30° . The object is modelled without distorting the effect as a result of excessive shadowing. This set-up 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 92

3.1W/404lm

Light colour

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

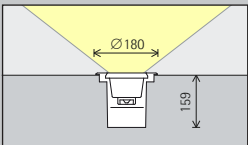
Light
distribution

	Recessed wallwashers
	Wallwash
	Uplights
	Spot
	Flood
	Wide flood
	Oval flood

Control

	Switchable
	DALI

Size 3



8.1W/1149lm

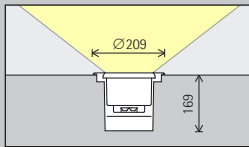
	2700K CRI 92 *		3500K CRI 92 *
	3000K CRI 92		4000K CRI 92
	3000K CRI 97 *		

	Recessed wallwashers
	Wallwash
	Uplight
	Wide Flood

	DALI
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Accessories

	Connection sleeve		Recessed housing		Installation unit
	Branching sleeve		Mounting kit		

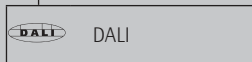


Size 4

16.2W/2298lm	4.2W/426lm (Narrow spot)
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	2700K CRI 92 *		3500K CRI 92 *
	3000K CRI 92		4000K CRI 92
	3000K CRI 97 *		

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



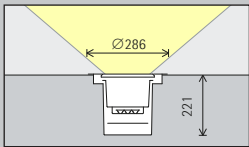
* available on request

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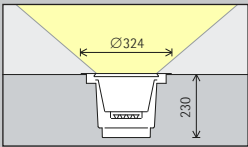


Tesis New In-ground luminaires

Construction size



Size 5



Size 7

LED module
Maximum value
at 4000K CRI 92

24.3W/3446lm	4.2W/426lm (Narrow spot)
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32.3W/4595lm	12.7W/1278lm (Narrow spot)
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Light colour

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

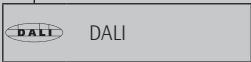
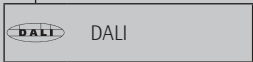
	2700K CRI 92 *		3500K CRI 92 *
	3000K CRI 92		4000K CRI 92
	3000K CRI 97 *		

Light
distribution

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

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

Control



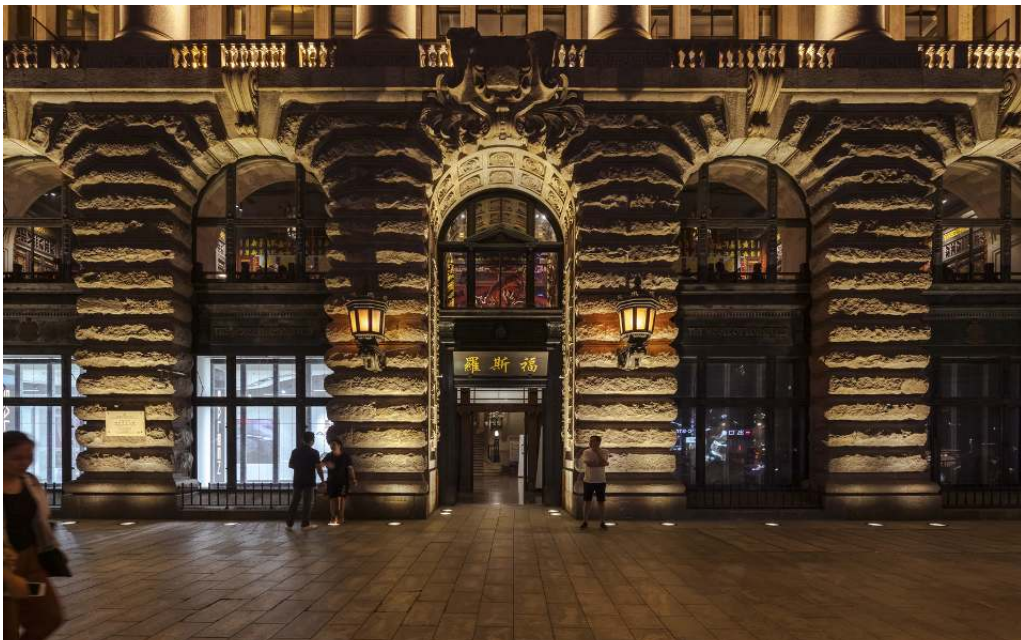
Accessories

	Connection sleeve		Recessed housing		Installation unit
	Branching sleeve		Mounting kit		

* available on request

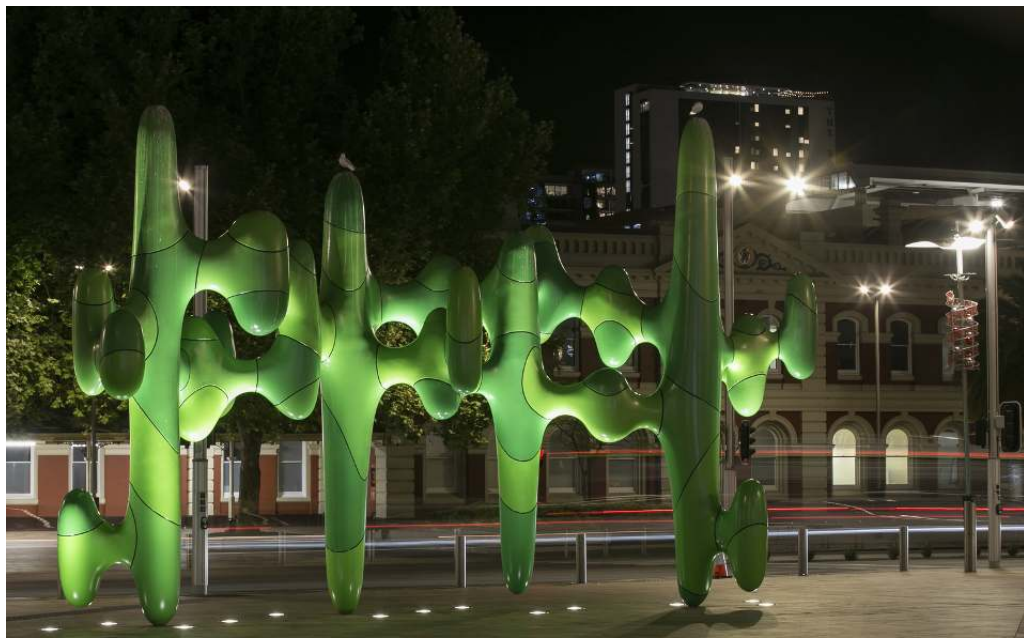
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The Bund waterfront, Shanghai.
Lighting design:
Huangpu District Lighting
Landscape Management Office.
Photography:
Jackie Chan,
Sydney.

Cactus sculpture,
Perth. Artist:
James Angus.
Photography:
Matthew Devlin.





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