**ERCO top-flight durable downlights specially designed for Changi Airport's ambitious expansion**

**ERCO's Compar linear downlights have played a central role in the renewal and expansion of Terminal 2 at Singapore's Changi Airport. The ambitious project has added 15,500 square metres to the terminal building and increased the airport’s capacity by five million passengers a year to 90 million.**

Altogether, around 5500 [Compar](https://www.erco.com/press/6353/en) fittings were installed in key areas providing economical ambient lighting for the departure and arrival halls, baggage claim belts and transit halls. The airport's signature garden theme is very evident in the contemporary design concept for T2, not only with lush planting and nature-inspired elements – such as a 14m tall and 17m wide digital waterfall – but with extensive use of natural materials for wall cladding and flooring. The 'green' emphasis is not just literal. Changi Airport Group has committed to zero carbon growth until 2030, with absolute emissions capped at 2018 levels.

**Customised to cut waste**

Together with the many requirements of such a complex public environment, sustainability was therefore a key factor for the lighting system. Lighting designer Philippe Almon of PhA Concepteurs lumiere was keen to eliminate any unnecessary usage of material. The low energy lighting solution therefore comprised highly efficient LED [Compar downlights](https://www.erco.com/press/6353/en) specially modified for the project. Normally recessed, the Compar linear fitting comes with a mounting trim and a clip for easy installation. PhA wanted to reduce material use by removing the trim, which meant devising a new way of attaching it to the ceiling.

ERCO designers came up with the idea of punching into the heat sink to accommodate the hanging system, creating a hook to accommodate the suspended structure. This was done in such a way that it didn’t adversely affect the heat management of the fitting, retained the integrity of the manufacturing guarantee and still met the requirement for easy and fast installation. The suspended ceiling element features carefully positioned linear slots that allow the fitting to sit flush with the surface, seamlessly integrated.

**Small but powerful**

The airport environment involves large spaces and soaring ceilings which require high light levels and even illumination. Balanced with this is the need for both visual and psychological comfort – a glare-free, high quality and calming light. The advantage of the [Compar downlight](https://www.erco.com/press/6353/en) is that while it is a powerful source for high-volume spaces, it is small and discreet, perfectly merging with the architecture. Featuring an anti-dazzle louvre which can be coated in a variety of finishes, it remains an almost invisible light source from most angles. Not only did the luminaires provide double the target light levels on the floor surface but it was achieved with fewer fittings and less wattage than comparable solutions.

Future maintenance and durability of luminaires is a crucial consideration in an airport environment, with 24/7 operation, heavily trafficked spaces and difficult-to-access ceilings. [Compar downlights](https://www.erco.com/press/6353/en), like ERCO luminaires generally, are technically of a very high standard, designed and manufactured to last for decades. This dramatically reduces the need for maintenance, saving operating costs. ERCO's focus is on long-life luminaires that offer sustainable lighting solutions. With in-house designed and manufactured optics, electronics and heat management, a timeless design and application-oriented light distributions, the [Compar downlight](https://www.erco.com/press/6353/en) incorporates all aspects of the company's ethos of '[lighting durability](https://www.erco.com/press/7841/en)'.

**Special support for individual product solutions**  
[Compar](https://www.erco.com/press/6353/en) comes with a choice of distributions (from 15° spot to 60° x 80° oval wide flood and wallwash) and extensive options for the individualisation of series products. With '[ERCO individual](https://www.erco.com/press/6770/en)', the company also supports the development of sophisticated special luminaires, according to customers' needs. The world’s most awarded airport, Changi links Singapore to some 140 cities globally, with over 100 airlines operating more than 6000 weekly flights. The expansion scheme, which took more than three years, also supported additional infrastructure, provided new systems and increased retail and F&B offerings. 'We hope T2 will set a new benchmark for customer service and delight among airports,' said Tan Lye Teck, CAG’s programme director for the Terminal 2 Expansion Project.

**Project data**

Project: Changi Airport, Terminal 2, Singapore

Architecture: JH Boiffils, Paris / France, RSP, Singapore  
Lighting design: PhA Concepteurs Lumière, Paris / France  
  
Photography: Finbarr Fallon, Singapore

Products: Compar linear, ERCO individual

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Photography: Finbarr Fallon

**About ERCO**

ERCO is an international specialist for high-quality and digital architectural lighting. The family-owned company, founded in 1934, operates globally in 55 countries with independent sales organisations and partners.

ERCO understands light as the fourth dimension of architecture – and thus as an integral part of sustainable building. Light is the contribution to making society and architecture better and, at the same time, preserving our environment. ERCO Greenology® – the corporate strategy for sustainable lighting – combines ecological responsibility with technological expertise.

At the light factory in Lüdenscheid, Germany, ERCO develops, designs and manufactures luminaires with a focus on photometric optics, electronics and sustainable design. The lighting tools are developed in close collaboration with architects, lighting designers and electrical designers. They are used primarily in the following applications: Work and Culture, Community and Public/Outdoor, Contemplation, Living, Shop and Hospitality. ERCO lighting experts support designers worldwide in transforming their projects into reality with highly precise, efficient and sustainable lighting solutions.

If you require any further information on ERCO or image material, please visit us at [www.erco.com/press](https://press.erco.com/en). We can also provide you with material on projects worldwide for your media coverage.