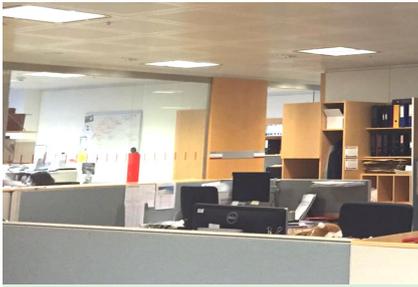


## Case study: elite City law firm

### Client saves 60% with modular luminaire LED retrofit



#### Summary

When GCL changed a City law firm's luminaires to LED, they saved the client a huge 60% in running costs! GCL were contracted by Skanska to replace the existing 80W fluorescent modular luminaire with an LED retrofit for a prestigious law firm within the Square Mile, in the City of London.

The law firm now benefits from:

- 60% saving in running costs
- Quick return of investment
- Positive environmental impact



*'We use GCL as our main electrical supplier and sub-contractor as they go above and beyond their competitors with their planning, execution of works and aftercare plan.'*

Mike Rowlands, Skanska

#### GCL Building Technologies

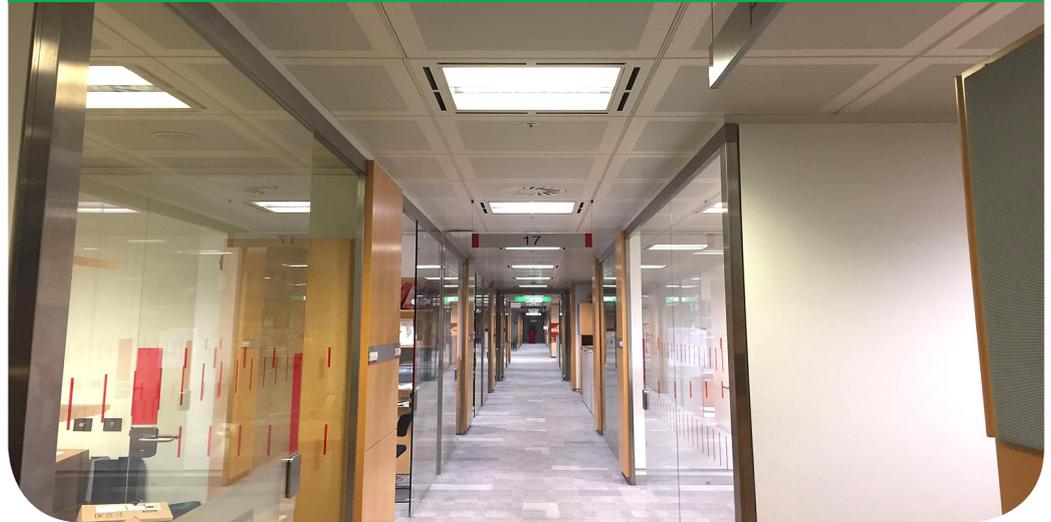
PO Box 93, Tunbridge Wells,  
Kent, TN5 7ZR

[sales@gcl.uk.com](mailto:sales@gcl.uk.com)

London: 020 3906 6070

Kent: 01892 576 950

[www.gcl.uk.com](http://www.gcl.uk.com)



#### The Requirements

A distinguished law firm resides on twelve floors 72,000 M2 in an impressive building in the City. The building was designed by Sir Norman Foster. Skanska wanted to reduce energy use and replace the existing 80W fluorescent modular luminaires. The previous solution was to remove the luminaire and transport them to a factory for modification, before returning them. This was costly and time consuming with potential for damage to the luminaires.

The client wanted to:

- Find a solution onsite to save time
- Reduce maintenance costs
- Reduce their carbon footprint
- Guarantee all work completed at night
- Reduce energy usage by 60%
- Ensure no interruption to Users

#### The Challenges

The project presented a number immediate complications that GCL needed to overcome. They had to design a retrofit solution because access was difficult – the luminaire housing was integral to the construction of the ceiling and return airflow system. Moreover, the emergency lighting utilised a closed protocol 110v central battery system. Until GCL arrived, a solution had not been found to utilise this central battery system, as a result the existing emergency luminaires were left unchanged.

With an estimated 10,000 luminaires within the building, GCL solved this by designing an emergency retrofit that met BSEN 12464 and was CIBSE LG7 glare compliant.

#### The Solution

GCL worked with partners to design a retrofit LED gear tray that could be quickly installed in situ by highly trained engineers. Installing the LEDs onsite meant the client:

- Saved road transportation CO2 emissions
- Prevented product damage in transit
- Saved time

The gear tray was tested within a photometer and produced the following results: 5000 lumen source output, 36 Watt system power consumption and 93 lumens per circuit Watt. GCL's engineers were then able to utilise the existing 110v circuitry and install a new 55W PLL lamp adjacent to new LED circuit boards. The emergency lighting was successfully designed with the central battery system. The new process was expedient – a complete floor being replaced within two weeks.

#### Benefits to the Client

The client is delighted with an incredible 60% reduction to running costs. There are even more savings to be made with a number of luminaires being dimmed. This not only saves energy, but enhances the ambience too. As the entire installation was changed to LED there is aesthetic continuity throughout. The client has benefited considerably:

- At least 60% saving in running costs
- LEDs compliant to building regulations
- Very little or no maintenance required
- Fast ROI for the client

To find out more, speak to one of our dedicated team on 020 3906 6070