



FUTURE
LIGHTING

CASE
STUDY



MARCONI
HOUSE
LONDON WC2

ROI:
18.5
MONTHS

MARCONI HOUSE



Urban splendour

Marconi House is an imposing development of 86 luxury apartments that have been developed behind the Grade 11 listed façade of this historic building. Originally built as the Gaiety Restaurant, adjacent to the Gaiety Theatre in London's Kingsway, the building was taken over by the English Electric Company in the 1920s and houses the room which served as the first broadcasting studio of the BBC. This iconic building is located just a few minutes' walk from Covent Garden and Leicester Square and now features a 24-hour concierge, spa, restaurant and lounge facilities.

Despite the very high standard of the development, lighting in the communal areas had become outdated. This had led to escalating maintenance costs and the failing system was no longer fit for purpose.

Future Lighting was delighted to be commissioned to assist with the design and build of a new, energy efficient lighting scheme to replace the existing system while still complementing the original design of the building.

Problem areas identified were:

- High wattage lighting with associated high running costs
- Ongoing lighting failures resulting in a poorly maintained feel
- Mix of lamp types and poor colour matching
- Vast heat created from the existing fittings making the lobbies unbearable during summer months
- Failed and insufficient emergency lighting

The main apartment lobbies from the eighth floor down used very carefully designed recessed linear fluorescent luminaires. The original designer had specified T5 fluorescent technology which worked well until it began to age. Several years down the line, a huge amount of heat was being generated, reducing the energy efficiency of the system as well as making the common areas unbearably hot for residents.



BUILDING TYPE :
RESIDENTIAL



NUMBER OF DWELLINGS
82



TECHNOLOGY USED
LED



MONEY SAVED
£9770.00 (pa)



The maintenance team had done their utmost to repair the system but the task was never ending, so property managers Galliard Homes contacted Future Lighting for help. We arranged a survey and proposed a retrofit LED solution that would utilise the existing flush lamp housings. We built a custom made system and provided a free trial offering two colour output options. Residents were given the opportunity to look at the proposed installation and choose a preferred colour. Warm white 3000k was chosen and the new design began to take shape.

Challenges included:

- Utilisation of the existing wiring to prevent major cosmetic damage.
- Designing a lighting scheme that would complement rather than detract from the original design of the building.
- Avoiding disruption to residents and their visitors.



Future Lighting's Solution

Apartment lobbies

- Removing high wattage lighting technology.
- Building a custom LED solution that would fit within the existing luminaire housings.
- Incorporating an emergency lighting solution within the modified fittings



Entrance hall

- Removing all alcove fluorescent lighting and replacing it with a new LED custom built solution, to provide equal colour rendering throughout, reduce energy and remove all ongoing maintenance issues.
- Removing all high wattage halogen lamps and retrofitting new LED alternatives

The works were completed in less than five days without disruption to the building, its internal or external decor or any interruption to residents.



New LED lights pay for themselves with the money saved each year

The savings made at Marconi House are hefty. The lighting upgrade totalled £16,530 and will reduce energy costs from £11,800 to £2,027 per annum. Both Galliard Homes and their residents were delighted to discover that their return on investment (ROI) will only be 20 months. In addition Future Lighting has given a five-year guarantee on the refurbishment and FREE on-going maintenance.



CO₂ SAVED(T)
44.32



RETURN ON INVESTMENT
18.5MONTHS

Future Lighting Case Study

LAMPS AND FITTINGS

Area / Location	Fitting & Lamp Type	Wattage	No of Lamps (per fitting)	Total Wattage (per fitting)	No of fittings	Total Area Wattage (used)
Entrance Lobby	49W Fluorescents	49	1	55	26	1430
	70W Halogen	70	1	70	59	4130
Apartment lobbies	49W Fluorescents	49	2	110	138	15180
Totals					223	20740

COST SAVING CALCULATIONS

ENERGY / COST SAVING CALCULATION	PRE	POST
Cost per kWh	0.12p	0.12p
Watts used (ph)	11226	1929
Lights "ON" per day (hrs)	24	24
Voltage	230	230

ELECTRICITY USED £'s

Day	£32.30	£5.50
Month	£969.90	£166.80
Year	£11,800.00	£2,027.00

ELECTRICITY USED £'s

	COST	SAVINGS
INSTALLATION (PARTS & MATERILS)	£16,530.00	
ANNUAL ELECTRICITY SAVED		£9770.00
ANNUAL MAINTENANCE COST (LIGHTING ONLY)		£1500.00
TOTAL		£11,270

ROI: 18.5 MONTHS

Have you got a lighting problem? Let us help you find a solution.

Contact us for further information on 0203 826 9999 Or email info@future-lighting.co.uk

Let Future Lighting use our energy – to save yours



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