



FUTURE
LIGHTING

CASE
STUDY



BOARDWALK
PLACE
LONDON E14

ROI:
32
MONTHS

BOARDWALK PLACE

Tripping the light fantastic at that famous bend in the Thames

Poplar and Blackwall Basin have been transformed. From run down dockland to prime real estate, properties in the area witnessed a surge in demand. Nestling just opposite the O2 and North Greenwich and having the Thames bending dramatically close by, this is a postcode worthy of serious consideration by the huge influx of people wanting to live in the capital.

It's geography gives it stunning sunrises and sunsets. The light glistens attractively across the small dock complex that has seen so many comings and goings through London's maritime history. In 1828 the complex was created for the east India Dock Company and was connected by rail: the height of forward thinking at the time. What would the Victorians have thought of the new Crossrail project that is thundering its way through the London's underbelly?

The Future Lighting team was delighted to be asked to be a part of the Boardwalk Place luxury property re-development. It's a 10-acre site offering luxury homes, underground parking, 24-hour concierge service and a direct line to Canary Wharf. Knowing how dramatic the sun is in this glistening waterside development it was vital to light up inside in an equally dramatic manner.

Boardwalk challenges included:

Producing a comprehensive overhaul and redesign of all lighting systems.

Key problem areas identified were:

- high wattage lighting with associated high running costs
- old technology removal, including bulk head and outdated PIR systems removal
- lobby and staircase system enhancement
- remote occupancy detector fitment
- sourcing LED retrofit alternatives
- car park lighting overhaul
- guaranteeing security and maintenance.



BUILDING TYPE :
RESIDENTIAL



NUMBER OF DWELLINGS
12



TECHNOLOGY USED
LED & CONTROLS



MONEY SAVED
£1388.00



Future Lighting's Solution

We designed, supplied and installed a new Energy Efficient lighting solution to reduce energy used, control lighting during occupied periods only and eliminate the considerable on-going maintenance costs.

This included:

- The remove all old technology, high wattage light fittings to all lobbies, stairs, reception and facility rooms throughout
- Replacement of staircase lighting for new LED Bulkheads with integral Occupancy Detectors installation, preventing wasted energy used during unoccupied periods.
- Replacement of all communal lobby area lights for new retro-fit LED alternatives.
- Installation of remote occupancy detectors to apartment communal lobbies as a means of controlling lights during occupied periods only.
- Replacing the under-croft car park lighting for new LED alternatives and replace the existing controls with microwave technology so only controlling lighting during occupied periods during dusk hours
- Supplying a 5 Years Guarantee and FREE on-going maintenance

Within a typical apartment lobby we have specified the replacement of old type 50W halogen spot lights with new 4W LED alternatives. Not only will this save vast amounts of energy usage (90%) and high maintenance costs, it will also improve lighting levels too.

The main staircase used old type switch-start compact fluorescent bulkheads lights which were 10-15 years old and been constantly repaired. The fittings back plates and diffusers were brittle and discoloured. In addition they were controlled via a grouped PIR system meaning all lights switch on when any detector was triggered. This type of control is now inefficient and integral sensors were used to prevent grouped switching.

All compact 35W fluorescent fittings were swapped for new 14W LED alternatives with integral occupancy and light level detectors so switching lights "on" only during dusk hours and when occupied only. Those areas alone are calculated to save 60% plus in wasted energy. Examining footfall patterns isolated these staircases were rarely used. This saved energy costs and also eradicated all on-going maintenance issues, saving both time, inconvenience and additional costs.



CO₂ SAVED(T)
5.3



RETURN ON INVESTMENT
32 MONTHS

Future Lighting Case Study

SUMMARY OF LAMP & FITTINGS

Area / Location	Fitting & Lamp Type	Wattage	No of Lamps (per fitting)	Total Wattage (per fitting)	Amount of fittings	Total Area Wattage (used)
Porch	50W Halogen Spots	50	1	50	2	100
Entrance Lobby	Megaman Spots	14	1	14	16	224
Staircase	28W 2D Bulkhead	35	1	35	8	280
Apartment Lobbies (4no)	50W Halogen Spots	50	1	50	32	1600
Undercroft Car Park	Twin 70W Fluorescent Bulk-head	70	2	140	4	560
TOTALS		219	6	289	62	2764

COST SAVING CALCULATIONS

ENERGY / COST SAVING CALCULATION	PRE	POST	Savings
Cost per kWh	0.14	0.14	n/a
Watts used (ph)	2764	408	2356
Lights "ON" per day (hrs)	10	2.1	7.6
Kwh's Used (pA)	10089	357	9731
Voltage	230	230	n/a
CO2 Emissions pA (tonnes)	5.47	0.19	5.27

ELECTRICITY USED £'s

Hour	£0.16	£0.01	£0.16
Day	£3.87	£0.14	£3.73
Month	£119.96	£4.25	£115.71
Year	£1,439.49	£51.00	£1,388.49

SUMMARY OF COSTS, SAVINGS and ROI

Item	Cost	Savings
Installation (parts and materials)	£5,840	
Annual Electricity Saved		£1,388
Annual Maintenance Cost (lighting only)		£750
Total	£5,840	£2,138

Future Lighting Case Study

YOUR NEW LED LIGHTS WILL PAY FOR THEMSELVES WITH THE MONEY THEY SAVE YOU ANNUALLY.

ANOTHER BRIGHT IDEA FROM FUTURE LIGHTING

There has never been a more viable time to invest in energy efficiency.

Businesses are looking to combat rising energy prices, reduce their carbon footprint and maintenance costs. It's good for the economy and good for the planet.

Many businesses are being forced to make these changes through the CRC Energy Efficiency Scheme. Installing LED lighting is the obvious choice for drastic energy savings. It's a quick and easy win on CO2 reduction too.

There are lots of incentives to make the switch. Funding options exist for your LED project through the Carbon Trust and Salix Finance.

An even bigger win-win for business is the Tax Allowances through the ECA Scheme.

Please contact us for further information on 020 3665 5211 Or email

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LET FUTURE LIGHTING USE OUR ENERGY - TO SAVE YOURS





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