



FUTURE
LIGHTING

CASE
STUDY



THAMES
EYOT
LONDON TW1

ROI:
35
MONTHS



THAMES EYOT

ON THE WATERFRONT

The Art Deco Thames Eyot flats occupy an enviable position on the banks of the River Thames in Twickenham on the outskirts of London. The block has an interesting history. The flats date from 1935 and were built on the site of Poulett Lodge, an eighteenth century mansion that replaced an earlier house which burnt down in 1734. Poulett Lodge was demolished in 1933 to make way for the new block but the former coach house and stables survive and the beautiful riverside gardens, which also date from the 1700s, still remain. The main ornamental feature is a beautiful riverside lawn boasting 160m of river frontage. The gardens also feature a stone loggia, thought to date from the eighteenth century, as well as a small square grotto with a barrel vaulted roof which is decorated with shell work and blue slag. For residents who want to make the most of their waterside location there is a boathouse, with wet dock, thought to date from the nineteenth century.

BRIEF:

Following on from a full redecoration programme, Sweeting Property Management, which is responsible for maintaining and managing the flats, asked Future Lighting to carry out a site survey to assess the need for a lighting upgrade. The Future Lighting team was delighted to be asked to be a part of the refurbishment project at this luxurious and historic property.

Problem areas identified were:

- High wattage lighting with associated high running costs
- Ongoing high maintenance costs
- Failed and insufficient emergency lighting
- Lights on 24/7

The main staircases and lobby floors used obsolete switch-start compact fluorescent bulkhead lights with fittings, back plates and diffusers that were no longer fit for purpose. The lights were 10-15 years old and had been constantly repaired. In addition, they were being used as emergency lighting which had now failed all tests and needed replacing.



BUILDING TYPE :
RESIDENTIAL



NUMBER OF DWELLINGS
72



TECHNOLOGY USED
LED & CONTROLS



MONEY SAVED
£4500.00



Challenges included:

- Producing a comprehensive overhaul and redesign of all lighting systems.
- Designing an energy efficient lighting scheme that would not detract from the historic character of the block.
- Utilisation of the existing wiring to prevent major cosmetic damage



THE FUTURE LIGHTING SOLUTION

Future Lighting agreed to replace all compact 35W fluorescent fittings with new 14W LEDs with integral occupancy and light level detectors which will switch on only at dusk and when the building is occupied. The new fittings house dimming ballasts, so during unoccupied periods the lights run at 10% (1.4watts) providing an ambient light level. These areas alone are calculated to save residents a massive 75% plus in wasted energy. The staircases were rarely used, so refitting these areas alone saved energy costs and also eradicated all on-going maintenance issues, saving time and avoiding inconvenience and additional costs.



This included:

- The removal of all old-style, high wattage light fittings to all lobbies, stairs, reception and communal rooms throughout the building.
- Replacement of all existing entrance lobby feature lighting for new low energy LED strips.
- Replacement of staircase lighting for new LED bulkheads with integral occupancy detectors, preventing energy being wasted during unoccupied periods.
- Replacement of all communal lobby area lights for new retro-fit LEDs.



We designed, supplied and installed a new energy efficient lighting solution to reduce energy use, ensure lighting is switched on during occupied periods only and eliminate the considerable on-going maintenance costs. In addition Future Lighting has given a five-year guarantee on the refurbishment and FREE on-going maintenance.



CO₂ SAVED(T)
12.25



RETURN ON INVESTMENT
35 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)
Entrance Lobby Areas	58W Fluorescents	72	1	72	15	1080
Staircase, Landings, WC, Service Rooms	28W 2D	35	1	35	78	2730
Flood Lights	150W Son-E	150	1	150	2	300
TOTALS					95	4110

COST SAVING CALCULATIONS

ENERGY / COST SAVING CALCULATION	PRE	POST
Cost per kWh	0.14p	0.14p
Watts used (ph)	4110	743
Lights "ON" per day (hrs)	24	various*
Kwh's Used (pA)	4.11	0.74
Voltage	230	230
ELECTRICITY USED £'s		
Day	£13.81	£0.73
Month	£414.29	£44.00
YEAR	£5040.50	£535.00

SUMMARY OF COSTS, SAVINGS and ROI

Item	Cost	Savings
Installation (parts and materials)	£14,008.00	
Annual Electricity Saved		£4505.00
Annual Maintenance Cost (lighting only)		£500.00
Total		£5005.00

Notes:

- Prices are subject to VAT
- Maintenance cost based on an average of a typical 12months over a three year period
- Cost for installation includes for our 5 year Maintenance and guarantee cover. Subject to terms and Conditions.

ROI: 33 MONTHS

 **FUTURE** LIGHTING | www.future-lighting.co.uk

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