



## **LED Lighting**

LED Lighting was installed in a recent corridor refurbishment.

This first floor corridor is about 200metres long and was illuminated by 54 x 1200mm x 300mm recessed 2 lamp 36watt T8 fluorescent luminaires giving a connected load of 4570 watts. The corridor has no natural day lighting and the lighting control was achieved by a number of 2 way switches along the route. Lighting was often left switched on 24 hours a day, 7 days per week.

During a general corridor refurbishment the fluorescent lights were replaced with 84 x 19watt Philips Luxspace mini recessed dimmable LED down lights giving a connected load of 1600 watts. The manual switching system was replaced with a fully automatic switching arrangement using long range PIR detectors. The intelligent lighting control allows for dimming at times of low occupancy and automatic switching off when all the staff has left the building.



*Original Corridor*



*Refurbished Corridor*

### **Advantages:**

- Major energy reductions compared with the old fluorescent scheme, estimated energy savings of £3000/annum.
- The 19watt LED lighting is virtually maintenance free with a lamp life of 50,000 hours.
- Improved lighting control and absence detection provides energy savings when the building is unoccupied at night, weekends and bank holidays.
- Improved uniformity compared with the original fluorescent scheme.
- The Philips Luxspace mini recessed LED luminaire was capable of being installed in a very limited void space of about 130mm.
- Estimated installation payback time is about 2 years.

### **Drawbacks:**

- The initial installation cost of the LED solution is higher than a fluorescent type scheme.

***Brian Woodward – Boulting – Tel 01625 533992***