

**Client:** London Borough of Southwark  
**Contract:** Communal Bathroom & Toilet Extract Fan Replacement Programme  
**Commencement Date:** March 2012  
**Contract Duration:** Ongoing  
**Summary of Works:**

To carry out a programme to systematically check and replace where require all blocks for faults and repairs to communal bathroom and toilet extract systems. Ductclean were asked to submit a detailed proposal to LBS to carry out the work focussing heavily on residential blocks which had a history of complaints with regard to the lack of air flow or evidence of mould growth within the bathroom and toilet areas. The proposal provided a programme for the project to LBS which was discussed with the local tenant representatives through community meetings. These meetings were attended by Ductclean, to provide technical answers and provide support to LBS's representatives to deliver the proposals.

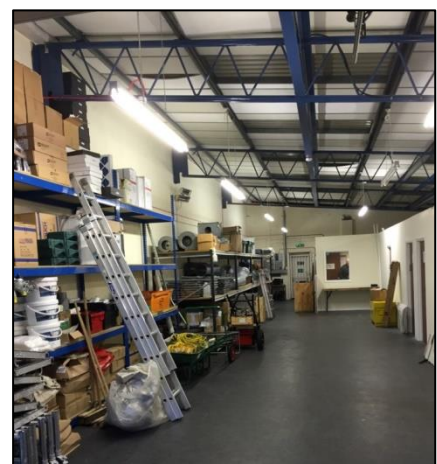
**The number of maintenance visits and responsive repair calls:**

Maintenance Visits - 2 per annum  
 Responsive repair calls - 48 over 24 months (including Fan / Motor / Controller replacements due to age)

**Details of Day to Day Management**

This contract is managed from our Ilderton Road Office in Southwark, which has a large storage capability which facilitates a fast response for repair and maintenance, and have long standing relationships with a number of suppliers and are able to obtain parts within a tight time frame. The surveying team comprised 2 qualified Ductclean Electrical Surveyors who has also been trained in-house with reference to all aspects of Fan maintenance and replacement requirements, together with Ductclean Operatives.

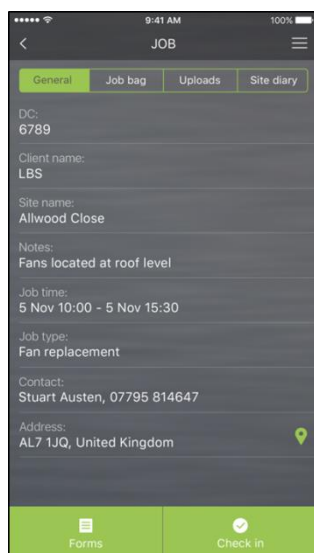
The team have a tool kit comprising an Electrical Multifunction Tester, Amp Meter, various hand tools and required access equipment and keys needed to access the building and roof area. They have an i-pad with the Fan Record Template (details of this template outlined below).



Ilderton Rd Depot Storage Facility

Upon arrival on site the team accessed the building and make their way to the Plant Room or Roof Area, once the location of the fan has been established they will record the following information on the i-pad template;-

All the above information will be electronically sent to the Contract Supervisor at the Ilderton Road Office to compile proposals for any communal ventilation replacement requirements. All the above will be repeated throughout the day's scheduled site visits.



Ductclean created our own bespoke Ductclean Survey App to expediate the recording of the aforementioned information. This App automatically downloads Risk Assessments and Method Statements when the operatives are within 500m of the site and they cannot proceed any further until this information is read and signed as 'read' by each member of the team. Once this is signed the App will then allow the team to move forward onto the recording part of the App template. Images are taken




ERP Fans awaiting installation

places them within the site location, this is recorded via GPS technology. Once the survey is signed as 'complete' the information is then automatically sent to all designated recipients, for example Stuart Austen and Paul Davies. When the Team

are 500m away the App will close, information is then sent automatically to James Lounton and the team will no longer be able to change any information. Stuart Austen or James Lounton then compile a quotation / proposal for the new works based on our findings and in line with the requirements of Non Domestic Services Compliance Guide 2013.

The proposal details the new fan type and running efficiency comparisons (see below), any new electrical works which may be required, delivery period and any impact this may have on the residents. Proposals / quotations were then submitted to Paul Davies for approval prior to submission to Southwark Contract Administrator. Any motor with an SFP (Specific Fan Power) greater than 0.5 watts will use in excess of the electric power needed to drive the fan (or fans) and will therefore not meet the new ERP (Energy Reduction Programme) requirements. This information formed part of our calculations enabling us to select new fans which meet all the current guidance and to calculate the annual saving on power used between the old and proposed units. (example below)

We were able to manufacture ERP fans to accommodate existing kerbs or upstands and this minimises the disruption on site and downtime for the fan changeover. The current standard downtime for fan exchange is a 1-2 hour window.

Estimated Fan Running Cost Comparison for Southwark							
	Quoted power used per unit (kW)	Units required	Total power used (kW)	Per hour (based on 0.17p price per electricity unit)	Per day running 24 hours	Per year 365 day	
Existing Mathew & Yates Belt Drive Fan	1.5	1	1.5	£0.255	£6.12	£2,233.8	
High Efficiency Fan-500	0.66	1	0.66	£0.112	£2.69	£982.8	
<b>£1250.93 Running cost saving per annum</b>							

### Quality Control

To ensure work undertaken on behalf of LBS was in compliance with the NICEIC Standards for planned preventative maintenance, Ductclean’s QM conducted internal quality audits to verify that operations continued to comply with the requirements of the quality system and the criteria of the associated as set out above, audits were conducted of **50%** of all work undertaken, **in order to monitor our performance against expectations**, which were administered by the QM.

### Resource Structure






As we have been completing projects of this nature for over 15 years we already have vast resources in place and are already fully mobilised to carry out the projects contained within this framework. We have over 120 directly employed operatives which allows us the flexibility to move operatives from one department to another to handle peaks and troughs. We have a large stores facility which is fully stocked with supplies which would be necessary to contacts of this nature. We have long standing relationships with a number of suppliers and are able to obtain parts within a very tight time frame.

### Improvements in service provision made since the commencement of the contract.

Where fans had exceeded their life cycle and required replacing DCUK put forward an energy efficient, long life, low energy bespoke fan units. These fans were manufactured as a direct replacement to the existing, therefore no additional up-stands or ductwork alterations were required and examples of running costs per hour were provided as shown in the above schedule.

### Innovation

As part of our commitment to innovation we instigated a labelling system for this project to enable all collected information will be used to provide an Asset Register / O&M Manual for each site, this will include;

-  Unique property reference (this is taken from Southwark’s I-world system).
-  Unique Asset ID No. In the form of a DCUK Data-Tag secured to each Fan. Each Tag, when scanned by the site technicians, automatically records the date, location, electricians name and time attending.
-  Manufacturer’s literature (where available due to age of Fan)
-  Schematic drawing
-  Wiring schematic and information on control panel

- 🌿 Log book containing the servicing requires and PPM tasks
- 🌿 Periodic electrical installation test dates
- 🌿 Fan inlet air flow rates
- 🌿 Details of any lightning protection
- 🌿 Energy use calculation
- 🌿 Pre and post images

