

## CASE STUDY

# St Paul's School Barnes

# ESG

## Pool Ventilation



*St Paul's School Barnes Swimming Pool*

**St Paul's school was founded in 1509 by Dean John Colet of St Paul's Cathedral; the school has been on the current site in Barnes since 1968.**

As part of their extensive sports facilities St Paul's has a 25m indoor swimming pool which is used for swimming lessons and many water sports.

ESG was commissioned by HTP Architecture LLP to design a new ventilation system for the swimming pool to bring the pool up to the latest standards.\* The pool hall underwent major refurbishment by the main contractor, Elliott Thomas Construction Ltd. ESG was employed to supply, install and commission the pool ventilation system including all the supply and extract duct work.



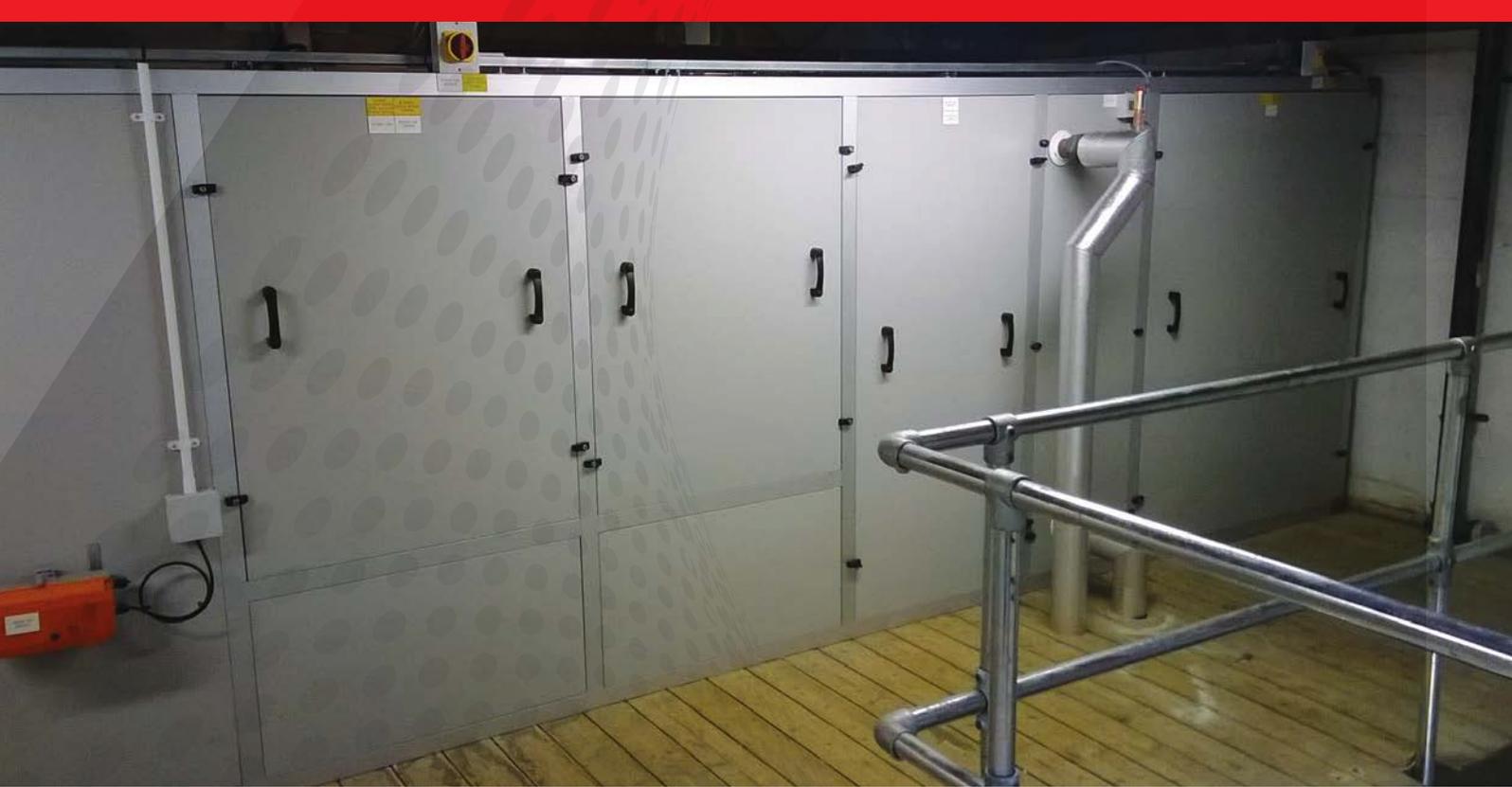
\* Sport England Guidance Notes 2013



The new system provides a real improvement in poolside comfort for all users – students, teachers and spectators. The sustainability and running cost benefits are also very welcome.



Hugh Muirhead  
Project Director, St Paul's School



The air handling unit (AHU) was shipped to site in component form and assembled in position on a mezzanine floor in the existing pool plant room. The AHU includes three energy conservation systems, variable fresh air ventilation, plate heat exchanger heat recovery and variable rate ventilation control. This provided an energy savings of approximately 75% and a carbon reduction of approximately 230 tonnes a year compared to the original full fresh air system it replaced.

ESG's loop air distribution system was installed in the pool hall with high level supply combined with low level extract. This provides an economic and efficient solution providing good conditions in the pool hall by efficiently picking up the moisture and by products of pool water dosing.

#### **System Specification**

*Pool - 25m x 12.5m*

*Water Temperature - 28.0°C*

*Air Temperature - 27.0°C*

*Pool Ventilation Rate - 5.3m<sup>3</sup>/s*

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**Pool Ventilation**



### **ESG - The Leading Pool Ventilation Specialist**

ESG designs and builds pool ventilation systems, completing over 100 in the last 5 years.

An independent specialist since 1979, ESG aims to provide all its customers throughout the UK with best conditions, quality products and a complete system.

- Design to meet individual customers requirements
- Provide systems for all types and sizes of pool
- Deliver lowest running cost and long life
- Embrace new technologies, to improve products

Contact us for a free appraisal of your requirements.

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