

**Improving Temperatures while
Reducing Costs & Carbon**

**QUEEN
ELIZABETH
OLYMPIC PARK**



Benefits

5 month ROI

£150K saving over 14 months

650 tonne reduction in CO₂ per annum

Significantly improved comfort

Condensation reduced



Overview

Client

The London Aquatics Centre is a world-class swimming and diving venue based at Queen Elizabeth Park, host to the 2012 Olympic Games. The Centre features a 50 metre competition pool, 50 metre training pool and 10 metre high diving pool with the capacity to hold up to 2,800 spectators.

Challenge

As with most pools and sports buildings, heat supplied from HVAC systems was rising up to the high ceilings, away from swimmers and spectators in the zone of occupancy at floor level. This not only meant that it was near impossible to maintain comfortable temperatures at the floor, despite the high heating costs, but the increased temperature at the ceiling accelerated heat loss to the outside, further compounding the problem and pushing energy costs even higher.

Solution

To resolve the issues of uncomfortable temperatures and poor heating efficiency 25 x Airius Model 60 Standard Series fans were specified to be installed throughout the space. This allowed for the heat at the ceiling to be continuously recirculated back to floor level, balancing temperatures, improving comfort and reducing the load on the HVAC system substantially. In the 14 months following installation the centre saved over £150,000 on heating costs, reduced their CO₂ emissions significantly and benefited from an ROI of only 5 months.