Woodcock Sports Centre - Aston University

Swimming Pool Air Handling

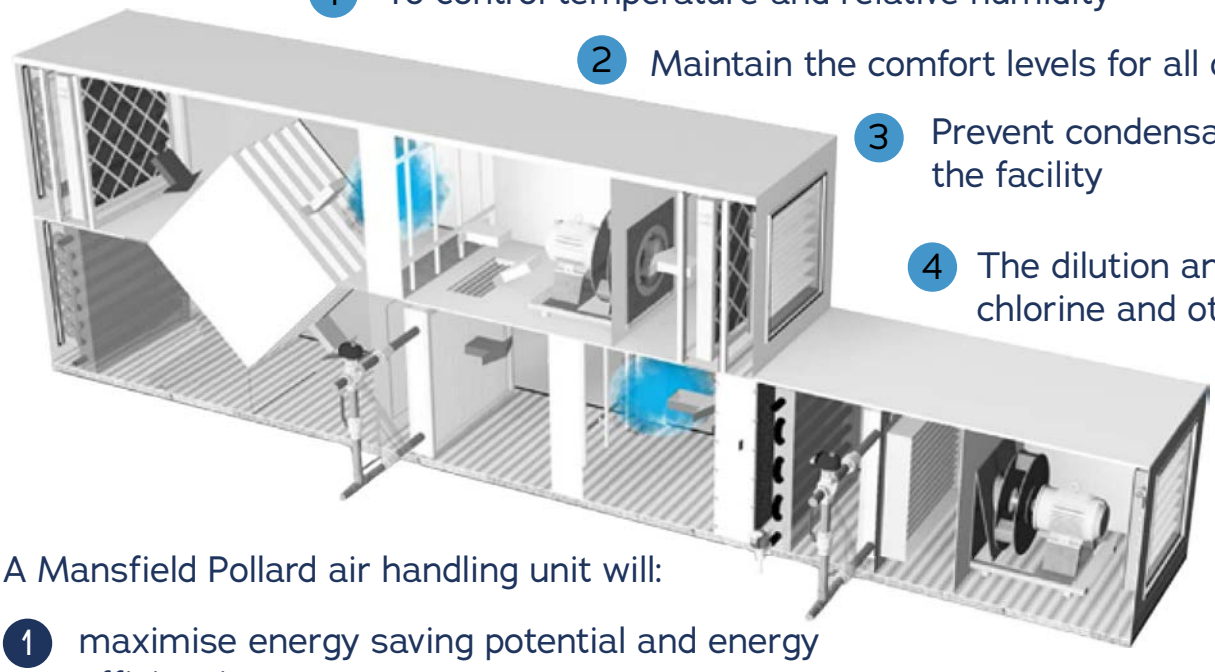
HOSTILE ENVIRONMENT

Air Handling Solutions by Mansfield Pollard

EXPERTS IN POOL AHU's

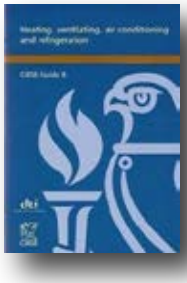
Owing to the corrosive atmosphere of swimming pools and spas, it is essential to design, manufacture and install a ventilation system specific to the individual building and environment. The design of the air handling system is driven by four main requirements:

1. To control temperature and relative humidity
2. Maintain the comfort levels for all occupants
3. Prevent condensation throughout the facility
4. The dilution and treatment of chlorine and other pollutants



A Mansfield Pollard air handling unit will:

1. maximise energy saving potential and energy efficiencies
2. provide unrivalled unit durability, performance and reliability
3. work across all the relevant standards and guidelines to ensure best practice and compliance with the most current recommendations and legal requirements

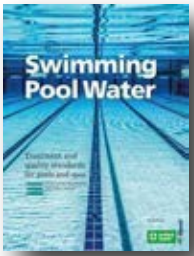


CIBSE Guide B: Heating, Ventilating, Air Conditioning and Refrigeration

BS EN 15288-1:2018 - Swimming Pools - Part 1: Safety Requirements for Design

The Health and Safety Executive's (HSE) Guidance for Managing Health and Safety in Swimming Pools

Building Regulations Part F (Ventilation)



Pool Water Treatment Advisory Group (PWTAG) Guidelines

MANSFIELD POLLARD
AIR MANAGEMENT EXPERTS

SPECIALIST AIR HANDLING

GRADE II LISTED SWIMMING POOL

Located right in the heart of Aston University's campus, Woodcock Swimming Pool (now part of The Sir Doug Ellis Woodcock Sports Centre) is Birmingham's oldest operational swimming pool. Originally opened in 1860 it was Birmingham's second public baths after the passage of the 1846 Public Baths and Wash-houses Act. In 1902 an additional pool, the First Class Pool, was built.

It still retains many of the original features including changing cubicles with terracotta arches, and elliptical steel roof girders that are pierced with quatrefoil shapes.

Woodcock Swimming Pool

PROJECT SUMMARY

A replacement supply and extract air handling unit serving the swimming pool area. The new unit was designed to maximise sustainability and environmental considerations including energy saving potential and energy efficiencies whilst providing the maximum levels of durability, all within the confines of the current air handling unit footprint.

ULTIMATE PERFORMANCE

Ultra Component Protection

Corrosion resistant coatings on fans, PHX, coils and dampers

Weatherproof Construction

intake & discharge cowls plus angled corrugated roof

Optimum Unit Durability

Coated internal casing and stainless steel bulkheads

Inlet & Outlet Attenuation

Melinex lined for moisture and chemical resistance

PROJECT HIGHLIGHTS

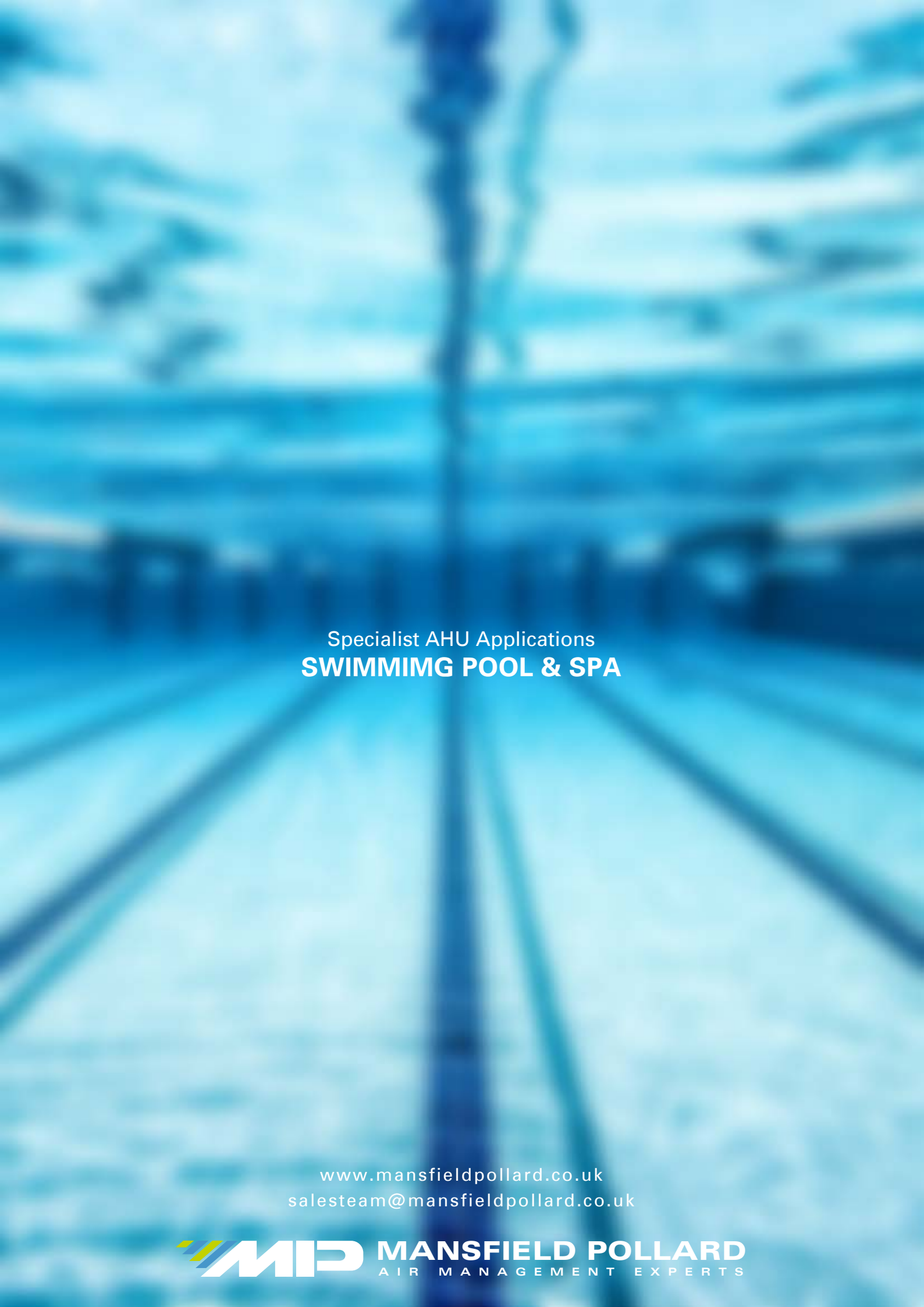
Manufactured in 4 sections and craned into a tight rooftop location,, the specialist AHU measured 9m x 3m x 2.5m supplying 6.6m^3/s of tempered air in the pool area.

Mansfield Pollard's design engineers focused on the creation of a **high integrity unit** with exceptional structure and chemical resilience for maximum durability and unit longevity. A fully weatherproof unit with corrosion resistant casing eternally and internal paneling through use of **stainless steel** and plastisol, mounted on a hot-dip galvanised steel parallel flange channel base.

Maximum corrosion resistance from **gold epoxy plated** heat exchanger, specialist **C4 coated** high efficiency EC fans and **powder coated** aluminium dampers. All coils were manufactured using bare copper tubes with **polyester coated** fins and stainless casework.

Inlet and outlet attenuation provided additional sound proofing with a protective **melinex lining** for maximum chemical and moisture resistance.

MANSFIELD POLLARD
AIR MANAGEMENT EXPERTS



Specialist AHU Applications

SWIMMIMG POOL & SPA

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