

# CASE STUDY



## King's College London Mathematics School

Expanding an existing specialist education facility through a coordinated MEP refurbishment, creating new teaching, breakout and support spaces for the school's September 2026 intake.

# Project Overview

A design-and-build MEP refurbishment at King's College London Mathematics School, Lambeth Towers, enabling the school to expand into the vacant former GP surgery at ground-floor level and increase capacity for the September 2026 intake. The works combined new services to the ground floor with targeted modifications and upgrades to existing first-floor areas.

**Location:** Lambeth Towers, 80 Kennington Road, London

**Client:** Wates

**Sector:** Education

**Delivery:** MEP Design & Build / Refurbishment



# The Challenge

The project required new MEP infrastructure to be integrated into an existing school while retaining and adapting services where appropriate. The ground-floor expansion introduced new classrooms, café, breakout, administration, reception, toilets and a hygiene room, with selected first-floor areas also modified.

A key design challenge was indoor air quality and thermal comfort. Project modelling identified that natural ventilation alone could not provide sufficient BB101-compliant air quality and TM52 thermal comfort across the teaching environment, requiring a coordinated hybrid ventilation and cooling strategy.

## The Solution

Sworx delivered a coordinated mechanical, electrical and public health package across the in-scope areas.

Mechanical works incorporated MVHR and NVHR ventilation, CO2 and temperature monitoring, night cooling, BMS-ready controls, LTHW modifications, LST radiators, comfort cooling and condensate drainage.

Electrical works included LV distribution upgrades, new small power, LED lighting and controls, emergency lighting, fire alarm modifications, access control and CCTV. Public health works included new and modified domestic water and drainage services serving the café, WCs and hygiene facilities.



# The Delivery

The refurbishment was coordinated around the existing building fabric and retained school infrastructure, with services adapted to suit the revised architectural layouts. Existing systems were retained where they remained suitable, while new installations were integrated to provide the environmental performance, power, lighting, life-safety and public-health services required by the expanded school.

The approach brought together ventilation, heating and cooling, electrical distribution, lighting, fire alarm, security, water and drainage within a single coordinated MEP strategy, supporting both the new ground-floor accommodation and targeted first-floor improvements.



# The Result

The completed works provide King's College London Mathematics School with additional high-quality teaching and support accommodation, helping the school expand its capacity for the 2026 intake.

New classrooms and communal areas are supported by upgraded ventilation, heating, cooling, lighting, power, life-safety and public-health systems, creating a more comfortable, flexible and operationally robust learning environment while making effective use of the existing building and retained infrastructure.