

# Toshiba Solutions

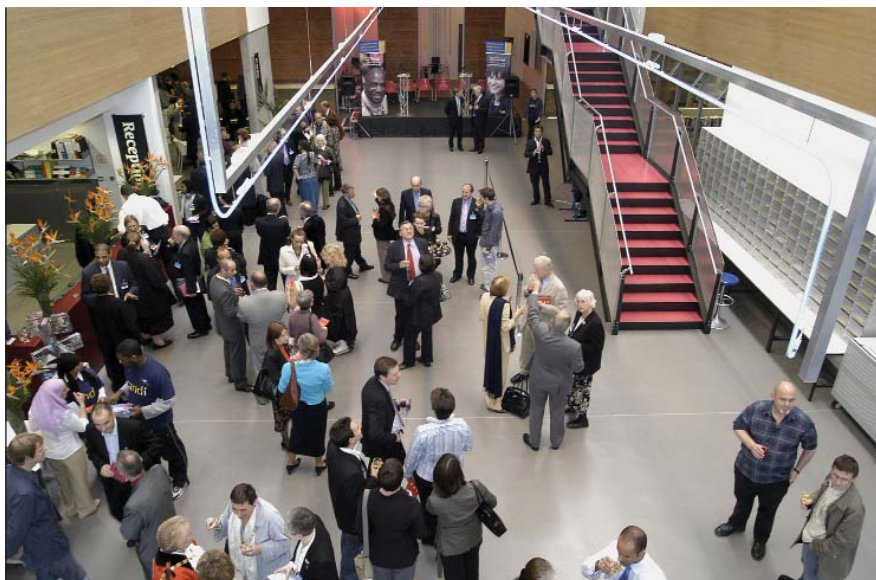
The right balance of cost and control

**Equipment:**

Toshiba VRF MMS

**Installer:**

EAC Services Guildford



## Application

City and Islington College's architecturally dramatic, Centre for Lifelong Learning is a new building that successfully incorporates energy-efficient Toshiba Air Conditioning, installed by Toshiba Accredited Installer EAC Services, within a fresh air ventilated eco-sensitive building services environment.

The latest part of the campus regeneration at this North London Further Education College has emerged from the combination of an old Victorian school building with a modern wraparound new building. Designed by architects Wilkinson Eyre, it is a dynamic and environmentally sustainable solution to the provision of essential community facilities.

The building houses classrooms and recreational and study spaces, as well as vital Information Technology (IT) labs and server rooms and a public library. The building is fully accessible to people with disabilities and is a secure environment. It has a striking glass façade and an entrance atrium that gives views deep into the site, showing where the old and new are brought together.



## Solution

Heavy mechanical ventilation for the building was rejected in favour of taller room designs with high exposed concrete ceilings that would help to cool the space overnight and provide natural ventilation on the rear elevation. The old high-ceilinged classrooms were retained. Solar shading is employed on the south-facing elevation to restrict heat gain and the need for large-scale air conditioning. However, energy-efficient Toshiba air conditioning comes into its own in the IT suites and server rooms at the front of the building. Here the additional heat load of the equipment means that air conditioning is vital to keep occupants comfortable.

The air conditioning system provides around 130 kW of cooling using eight outdoor units. Thirty-two Toshiba slim under-ceiling units were used by EAC throughout the conditioned areas as there was no void space for any other solution. The outdoor units have particularly small footprints and minimal acoustic attenuation. The stringent noise criteria, 45 dBA at one metre, were easily met. Indoors, the classroom use of the air conditioned rooms meant that the units had to deliver an average NR of only 35. The system is linked to the College's Building Management System (BMS) to provide fire alarm shut down and system enable and disable signals.



**[www.toshiba-aircon.co.uk](http://www.toshiba-aircon.co.uk)**  
**Telephone: 0870 843 0333**  
**Email: [general.enquiries@toshiba-ac.com](mailto:general.enquiries@toshiba-ac.com)**