



Funded by the Department for Children, Schools and Families (DCSF) as part of the Academy programme, City Academy provides eleven-hundred 11-19 year olds from the Bermondsey area with high quality, state-of-the-art facilities. The City of London is a prime sponsor, working in collaboration with London Borough of Southwark.

The Academy has a full range of teaching accommodation with all attendant support facilities. This includes halls for dining and assembly, sports halls, dance and drama studios, with sufficient space for school support and administration.

Selected as a specialist contractor, PEL Services was pleased to design, supply, install and commission a comprehensive range of systems to protect this prestigious building which won the Prime Minister's Public Building of the Year Award in 2006.

### Systems:

- **CCTV**

A network of CCTV cameras provides surveillance of sensitive areas both internal and external to the building. The cameras are cabled to three rack-mounted Vicon hard-disk controllers. In addition to a display consisting of flat-panel monitors in the security lodge, the system works over the building's Local Area Network (LAN) using TCP/IP protocol.

This arrangement has many benefits including: any computer connected to the LAN and loaded with the proprietary software with security license can access the CCTV system; providing the building's LAN allows for remote connection from the internet, any computer connected to the internet and loaded with proprietary software with security license can access the building's CCTV system; the CCTV system can simply be expanded using the LAN infrastructure.

- **Fire Detection and Alarm**

Designed to L1/P1 specification to protect life and property, PEL selected the Firewarn 8-loop analogue addressable control panel, which is conveniently located in a plant-room where cabling for device loops could easily be routed to serve each of the Academy's floors. Loop devices include point smoke detectors, manual call points and beam detection for the central atrium. Sounders and beacons are also connected to the same loop cabling, which gives significant benefits as cable requirements are greatly reduced.

Housing the comparatively large control panel in a plant-room also allows for smaller repeater panels (equipped with LCD and main system controls) to be conveniently sited at building entrances to display system status with alphanumeric location detail of any alarm condition.

Being a separate building, the sports complex is equipped with its own Firewarn 2-loop analogue addressable control panel. Networked to the main building's Firewarn, both control panels are programmed to alert to each other's status, but not evacuate should an alarm condition be detected in the other building.

- **Public Address**

In addition of automatic time-generated tones to signify class-change, Public Address is installed throughout the Academy to enable announcements to be broadcast to pupils and staff.

Coverage of assembly and hall areas are reinforced by the inclusion of Audio Frequency Induction Loops (AFILS) to assist the hard of hearing using their own hearing aid equipped with the T-mode facility. This arrangement works from both the site-wide public address and local sound reinforcement systems.





- **Access Control**

A small network of controllers restricts access through doors to areas off-limits to the general school population. Storerooms for high-value items, staff rooms and facilities require a card or key-fob to be presented to a proximity reader next to the door.

The security lodge houses a PC that is loaded with software to monitor and log each time a protected area is accessed and display which card is used. The software has comprehensive facilities to assign cards to holders, remove lost or stolen cards from the system, set restrictions based on area, time or date.

Once programmed, the individual door-controllers are capable of working independently of the network. Should network connection to the controlling PC be lost for any reason, the door controllers will continue to operate within their last set parameters. Upon resumption of the network, the door controllers will update the PC log with all actions performed.

- **Refuge Call**

Primarily intended for use by those with restricted mobility, Refuge Call provides a secure intercom link from hands-free call stations located on each level of all staircases to a display console sited in the reception lobby. Using the telephone-style handset included on the display, a conversation can take place with the caller to formulate a plan for an assisted evacuation.

Using very similar technology to Fire Telephones, Refuge Call has battery backup for continued use during a power failure and is continually self-monitored for faults. The system is wired using the latest generation fire-resistant cabling and call stations can be connected using loop or radial circuits.

- **Intruder Alarm**

PEL installed the most recent Menvier networked system, with nodes fitted throughout the building to reduce cabling and allow for easy future expansion. Apart from the user keypads installed at strategic entrance/exit points, this allows the system to be very low profile.

Fully complying with the latest standards, the extensive use of dual-technologies to give 'confirmed alarm status' which is transmitted to a monitoring station using two different technologies ensures genuine alarms are received for action.

- **Disabled WC Alarms**

The City Academy has numerous facilities for the disabled, all of which are equipped with a pull-cord to enable the user to summon assistance.

Pulling the cord activates an audible/visual alarm outside the corresponding WC door, which is repeated on a display in reception. Resetting the alarm is only allowed by key at the point of origin to ensure a call is attended. This option is used in preference to a remote reset facility from reception.

- **Door Entry Intercom**

A simple communication link is provided between the main entrance gates and reception. This requires the caller to press a button on the hands-free vandal-proof external intercom, which rings the telephone style handset within reception. If the subsequent conversation provides adequate verification, the receiver can press a button to release a gate-latch and allow the caller to enter.