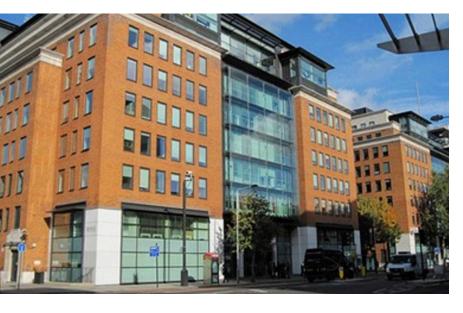ABB

Lacon House | 84 Theobalds Road, London – UK
ABB Cylon® BACnet Offers Ease of Integration with 3rd Party Manufacturers

Lacon House is an office block originally built in the early 1950's. A major structural refurbishment to increase the net area was completed in 1998.

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01 Lacon House
84 Theobads Road
London – UK

Projekt Overview
The building provides office accommodation over nine floors including ground, with a single basement level. Plant equipment is located in the basement and at roof level. The building is designed to be occupied by a number of different office tenants across the floorplates. The typical floor to floor height is approximately 3.05m.

The passenger lifts and toilet accommodation is located with a central core, with four satellite cores each containing a fire fighting lift, dry riser and escape stair. A car park is located at basement level accessed by two vehicle lifts.

 "One of the reasons for choosing ABB Cylon® was their use of the BACnet open protocol, which makes it very easy to interface with other control systems" – Graham Milward, Director, Eton Associates

Solutions Benefits
By utilising the ABB Cylon® ViperAX Head End software the existing control system, in this case Trend IQ3, was fully integrated into a BACnet solution.

Project Summary	
Applications:	Cooling, Heating, Air Handling, Monitoring, Metering
Number/Type of Building:	Multi-tenant commercial office building over 9 floors. 220,000 sq. ft. Total
Network:	BACnet® IP, BACnet MSTP
ABB Cylon® Hardware Installed:	ABB Cylon® Viper Head End Supervisor, CBR, CBR/MOD, CBT12, CBM
ABB Cylon® Software Installed:	ABB Cylon® BACnet ViperAX

As an open protocol, BACnet promotes integration across other manufacturer's platforms and systems to give a total integrated control solution. The ABB Cylon® BACnet solution is highly flexible and can be easily extended, allowing for the addition of new functionality and the ability to create new object types.

Flexible Design – the high level of configurability of the ABB Cylon® system enables the building owner to accommodate multi-tenants' requirements very quickly and with minimum cost.

ABB Cylon® Solution

The Shell and Core for the building was originally installed with Trend IQ3 controllers. The fit out required integration of the existing Trend solution into the new system. This was achieved with the installation of a ABB Cylon® BACnet solution utilising ABB Cylon® BACnet Routers (CBR) and unitary controllers (CBT12), all accessed via the ABB Cylon® Viper Head End. The conversion to BACnet of the IQ3 controls ensured full accessibility of the system via the ABB Cylon® Viper Head End.

The fit out of the building consisted of over 650 Fan Coil Units each fitted with a fully programmable ABB Cylon® BACnet CBT12 Unitary Controller which is a native BACnet Advanced Application Controller (B-AAC). This native BACnet controller is a truly open solution for the most demanding of applications. ABB Cylon® BACnet controllers offer unparalleled flexibility and performance on an open platform. The system can easily be extended by adding best of breed 3rd party devices on the same BACnet MS/TP network.

ABB Cylon® BACnet main plant controllers (CBM) were utilised on AHU's along with the CBR/MOD. The CBR/MOD is a ABB Cylon® BACnet Router complete with a Modbus port which allowed direct integration to the Modbus Inverter which was supplied with the packaged AHU.