

Authorized Dealer





Market segment Administration

Location Englewood Cliffs, New Jersey, United States

Total area 823,226 m² (250,000 ft²)

> Protocol BACnet

Installation type HVAC, lighting

Project type

Retrofit

Sylvan Corporate Center

Project Profile

Sylvan Corporate Center encompasses four three-story Class A office buildings linked by a central lobby. The campus includes on-site management and food services, covered parking, and state-of-the-art telecommunications technology and infrastructure.



Total system objects 18,180

Installed equipment





45 MACH-ProAir[™] controllers



10 MACH-ProCom[™] controllers



16 MACH-ProView[®] LCD with Router controllers



20 SMART-Sensor™ EPD devices



4 MACH-ProSys^{*} controllers



125 MACH-ProZone[™] controllers

Authorized Dealer <u>Empowered Buildings</u> installed a Reliable Controls building automation system during multiple renovation phases at Sylvan Corporate Center that delivered extensive improvements to how the campus is managed, including

- Integration with the variable refrigerant flow system
- Integration with variable frequency drive equipment
- Accurate control of air-handling units
- Accurate tenant-based scheduling
- Campus-wide control of indoor and outdoor lighting

Empowered Buildings commissioned 203 Reliable Controls devices to control the center's air-handling units, electric boilers, chilled water loop systems, cooling towers, variable frequency drives, variable air volume units, and water-source heat pumps.

Today building managers can access and control all four buildings using a MACH-ProWebCom controller. The three-in-one design of the MACH-ProWebCom combines a BTL Listed BACnet Building Controller, a BACnet Operator Workstation, and a powerful web server in a single package no larger than a typical building controller, saving facility owners the expense of client workstation software, software license renewals, and cloud services fees.

To control midsize rooftop and small mechanical room equipment, Empowered Buildings installed two MACH-Pro1 and 125 MACH-ProZone devices. The MACH-ProZone is packed with flexibility and provides highly scalable inputs and outputs with jumper-selectable relay configuration. For variable air volume control, Empowered Buildings installed 45 MACH-ProAir controllers throughout the complex, each with a built-in airflow sensor and onboard damper motor.





Installed software



Empowered Buildings used MACH-ProCom and MACH-ProSys devices to take control of large mechanical equipment in all four buildings. The MACH-ProCom and MACH-ProSys are fully programmable BACnet Building Controllers with extensive networking capabilities that achieve an optimum balance between form and function.

Building operators can access, control, and monitor comfort and energy use in the complex using high-resolution graphical interfaces on 16 MACH-ProView LCD with Router controllers. With the MACH-ProView LCD, users can choose from a selection of configurable views to display real-time data and edit object values on custom background images using text, graphics, and animations like buttons and sliders. Twenty programmable SMART-Sensor EPD devices distributed around the center deliver a modern communicating-sensor solution that allows building managers to connect with 10 configurable parameters like temperature, humidity, particulate matter, and volatile organic compounds.

Empowered Buildings carefully designed the new automation system to integrate third-party equipment using open protocols and provide users with real-time data. With RC-RemoteAccess BACnet Secure Network software, Empowered Buildings improved data communications security without the need for additional routers or controllers.

This large, fast-paced retrofit project required Empowered Buildings to install new and update existing equipment without disruption to building operations. The Reliable Controls building automation system will help lower Sylvan Corporate Center's carbon footprint and energy use for years to come.

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