

Authorized Dealer



Market segment
Government

Location
Palisade, Colorado, United States

Total area
1,950 m² (21,000 ft²)

Project type
Retrofit

Protocol
BACnet

Installation type
HVAC

Palisade Insectary

Project Profile

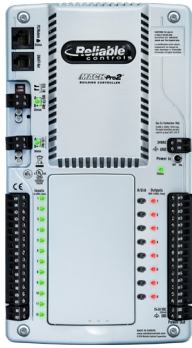
The [Palisade Insectary](#) imports, rears, researches, and distributes biological control agents that are the natural enemies of noxious weeds and pests. Successful pest control reduces production costs, decreases the amount of chemicals released into the environment, and establishes colonies of beneficial insects that offer a natural, sustainable pest-control solution. The insectary has cultured, studied, and released more than 90 species for biological control since it was founded by the [Colorado Department of Agriculture](#) in the 1940s.



Authorized Dealer Advanced Construction Technologies installed a Reliable Controls building automation system during a retrofit of the insectary.

Total system objects
264

Installed equipment



2 MACH-Pro2™
controllers



25 MACH-ProAir™
controllers



1 MACH-ProWebSys™
controller



5 MACH-ProZone™
controllers



25 SMART-Sensor™
EPD devices

A MACH-ProWebSys controller provides a web-based interactive platform that allows building operators to access the new control system easily and efficiently over the internet. No larger than a typical controller, the MACH-ProWebSys combines a BACnet Building Controller, BACnet Operator Workstation, and powerful web server in a single package that reduces capital expenditures by eliminating the need for workstation client software, license renewals, and fees for cloud services. For controlling large rooftop and midsize mechanical room equipment, Advanced Construction Technologies installed two MACH-Pro2 controllers, each a rugged, flexible, fully programmable BACnet Building Controller.

Advanced Construction Technologies also installed 25 MACH-ProAir controllers in the facility, each of which includes an airflow sensor and onboard damper motor. The MACH-ProAir is a fully programmable BACnet Building Controller with flexible input and output options, engineered to be suitable for a wide variety of variable air volume applications. Five MACH-ProZone devices control small to midsize rooftop and heat-pump units, and 25 SMART-Sensor EPD devices provide a modern networked-sensor solution that allows building managers to easily connect with up to 10 configurable parameters related to space.

Advanced Construction Technologies used RC-Studio software to integrate the facility's mechanical equipment and optimize strategies for temperature control and energy efficiency. An easy-to-learn, easy-to-use BACnet Advanced Operator Workstation, RC-Studio provides real-time fault detection and diagnostics, so facility managers can resolve issues before they become a problem.

RC-RemoteAccess BACnet Secure Network simplified IT management and improved data communications for the Palisade Insectary in a way that's scalable, secure, and affordable.



Installed software



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Today RC-WebView software, a browser-based building management solution that combines the power of enterprise tools with a simple interface, provides scalable visibility and system control at a glance. RC-WebView allowed Advanced Construction Technologies to connect to the building's network using a virtual private network hosted by the State of Colorado.

By installing a Reliable Controls system, Advanced Construction Technologies provided facility operators with the ability to control temperatures independently in lab spaces, allowing them to keep things like incubation chambers at a higher temperature and work areas at a lower one.

Advanced Construction Technologies worked closely with another Reliable Controls Authorized Dealer on this project: Colorado Controls provided system design and engineering assistance.

