



PEOPLE YOU CAN RELY ON:
Employee Profile Feature

LEED PLATINUM CERTIFIED:
HQ Annex Annual Review



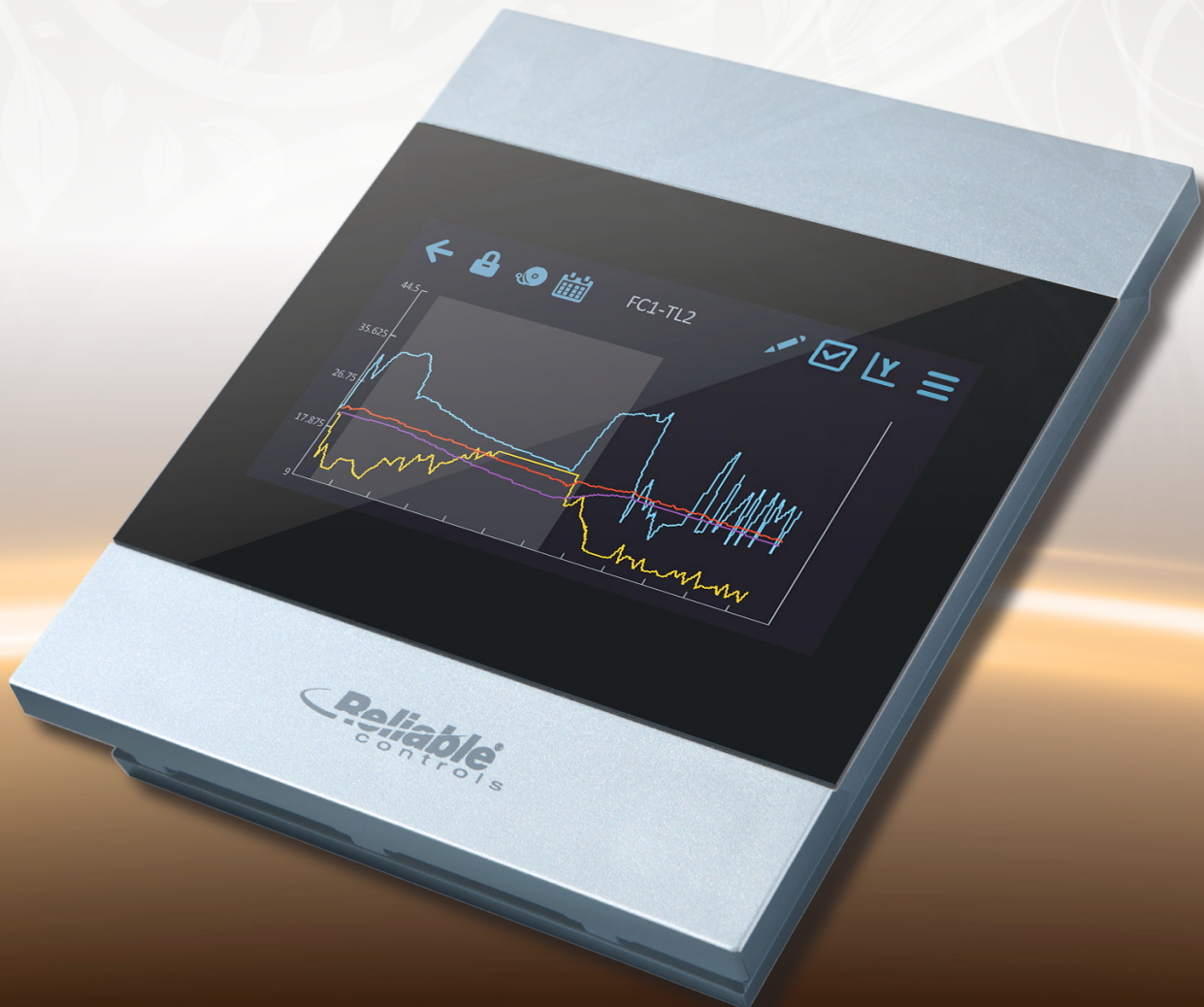
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RUNtime

The Official Quarterly Newsletter of Reliable Controls® Corporation

Q2 - 2017

Introducing MACH-ProView™ LCD with TRENDview



Elegant Efficiency



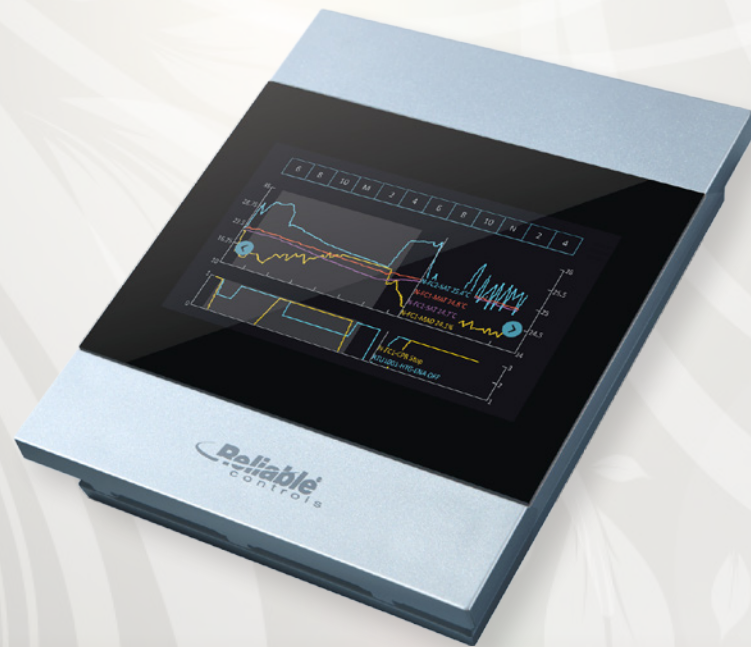
MACH-ProView™ LCD WITH TRENDVIEW

TRENDviews of Elegant Efficiency

MACH-ProView LCD with TRENDview is a powerful and elegant BACnet® Building Controller (B-BC) and BACnet Operator Display (B-OD), which provides a plenitude of attractive, high-resolution, graphical interfaces for the controlled environment. With the TRENDview feature, operators and end users can view Single-point and Multipoint Trend Logs in a selectable list, in flexible layouts to maximize the amount of room for analog and digital data.

The MACH-ProView LCD with TRENDview features a fully customizable LCD touch screen with an attractive array of interfaces to engage occupants of smart and green buildings. This freely programmable controller resides on Ethernet, Power over Ethernet (PoE), Wi-Fi, or EIA-485 networks. Using the MACH-ProView LCD with TRENDview, users can access, control, and monitor the comfort and energy performance of any space.

Backed by an industry-recognized, 5-year warranty and a worldwide network of certified Authorized Dealers, the MACH-ProView LCD with TRENDview empowers operators to easily track a building's performance.



TRENDview on the new MACH-ProView LCD can do more:

Single-point and Multipoint Trend Logs automatically become available at the touch of a new icon

Binary and multistate trends display separately, below analog trends

View and modify the timescale x-axis

Tap any place to see the data series names, values, and units at a particular time

Scroll forward and backward through the TRENDview graph

Define the scaling for the y-axis

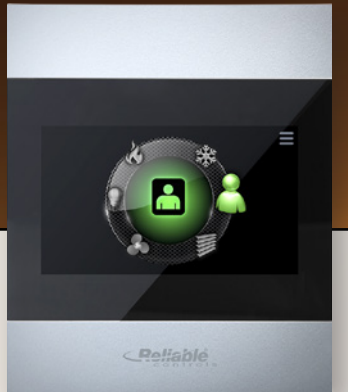
Set colors for each data series



Learn more about MACH-ProView with LCD:
www.reliablecontrols.com/products/controllers/MPV-L/



TRENDview: allows ease of access for operators and end users to their realtime system data, with Single-point and Multipoint Trend Logs without the need for a PC or any external device



SPACEview: a simple, intuitive interface for occupants to adjust environmental conditions in their space



LISTview: a flexible, customizable list of up to 12 system objects that an occupant or operator can quickly view and adjust



STATview: a familiar, programmable thermostat interface that allows users to monitor and control the operation of unitary HVAC equipment

Officially BTL Listed

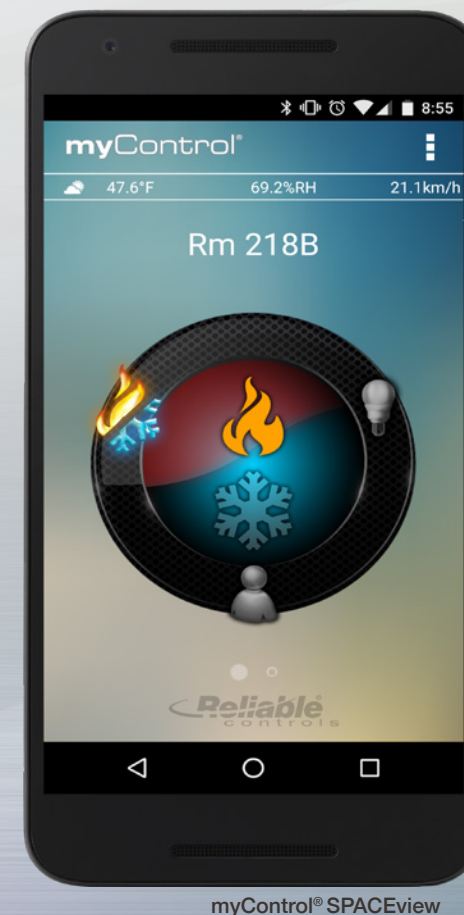


The MACH-ProView LCD is the first device to receive both BACnet Building Controller (B-BC) and BACnet Operator Display (B-OD) listings. The MACH-ProView LCD is also the only B-OD tested to Revision 14, the latest testable Revision, and the first to receive a BACnet Conformance Certificate.

The MACH-ProView LCD fully integrates with all BACnet products, allowing an elegant interface to the controlled environment. With a selection of configurable views and multiple color themes, the MACH-ProView LCD fits virtually any décor.



RELIABLE CONTROLS LEED PLATINUM CERTIFIED HQ ANNEX ANNUAL REVIEW



2017 Plans

Now that the “low hanging fruit” has been picked and the building is close to full occupancy, we need to find more innovative strategies to maintain the downward trend in energy consumption. We plan to:

- Track myControl temperature voting in the different zones of the building using RC-Archive® and RC-Reporter® in order to help identify heating and cooling issues
- Examine potential duct work changes as a part of a project to minimize sound transmission from private offices and conference rooms
- Reap the benefits of the previous year's improvements, as we expect a dramatic reduction in water usage due to the changes made to the building's pumps and their effectiveness

Demonstrating Consecutive Years of Energy Reduction

2016 was the best year yet for energy performance at our LEED® Platinum certified HQ Annex in Victoria, BC, Canada:

We **implemented myControl® via RC-WebView® for the entire HQ Annex**, so all occupants (the majority of the company's employees) can adjust temperature, blind position, light level, and occupancy from their mobile devices. The temperature adjustment is a simple “Warmer/Cooler” input, allowing occupants to vote for a higher or lower setpoint.

We **optimized the hydraulic fluid temperature control of the 40 hp elevator pump**, which resulted in a **50 percent reduction in energy usage of the elevator**.

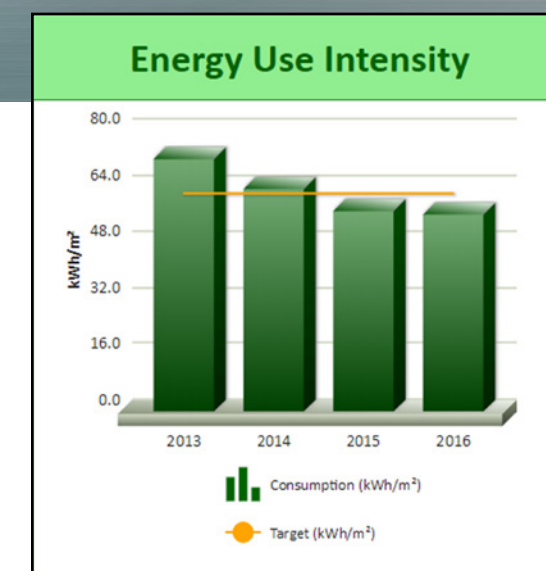
We **upgraded the toilet flush cistern pumps and added a buffer tank** to minimize pump operation. With this change, the lead pump now starts on every fifth flush and runs until the buffer tank is refilled.

The Reliable Controls HQ Annex completed 2016 with an **Energy Use Intensity (EUI) of 56.1 kWh/m²**, slightly below 2015's EUI of 57.3 kWh/m² and nicely below the design EUI of 58.8 kWh/m²

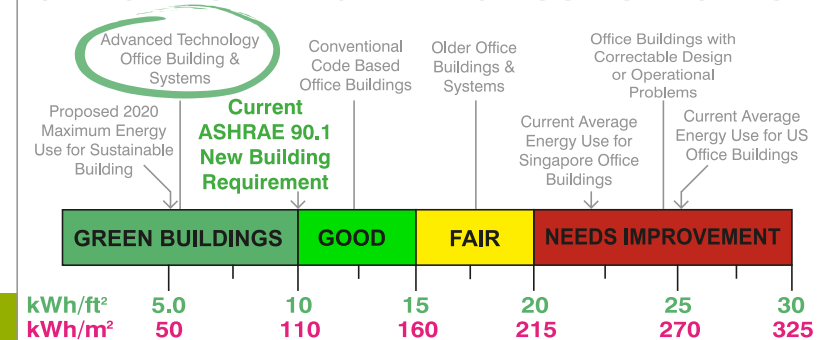
Energy Use Intensity (EUI) is used by the building performance industry to benchmark building energy consumption and facilitate comparisons. The RC-Reporter chart to the right displays continuous improvement over the past four years in terms of EUI.

In a presentation by Thomas Hartman at the 2015 International Green Building Conference in Singapore, Mr. Hartman displayed the chart below to help stakeholders appreciate the spectrum of EUI in office buildings. A building designed to be ASHRAE 90.1 will result in an EUI of 110 kWh/m² (10 kWh/ft²). Do you know what the EUI is for your building?

At 56.1 kWh/m², the energy use spectrum chart continues to put the Reliable Controls HQ Annex well into green building territory. Reliable Controls has occupied this space for over four years, with a steadily growing number of occupants. During that period, many improvements have been made to the sequence of operation of mechanical and electrical systems. The flexibility of the MACH-System™ means that changes are easy to implement and monitor.



OFFICE BUILDING ENERGY USE SPECTRUM



In simple terms, the Reliable Controls HQ Annex uses less than one half of the energy of an energy efficient building!

Better by design™

TRADE SHOWS

Visit Reliable Controls at these Trade Shows:



CUP Sustainability Showcase

April 22, 2017
Royal BC Museum
Victoria, BC, Canada
Booth #19-20



BuildTech Yangon 2017

May 18-20, 2017
Myanmar Convention Centre
Yangon, Myanmar
Booth #A09



CHES BC

May 28-30, 2017
Penticton Trade & Convention Centre
Penticton, BC, Canada



EFMA BC

May 31 – June 1, 2017
Penticton Trade & Convention Centre
Penticton, BC, Canada



CaGBC: Building Lasting Change

May 30 – June 1, 2017
Vancouver Convention Centre West
West Ballroom AB
Vancouver, BC, Canada
Booth #600

For a complete list of all trade shows, please visit:
www.reliablecontrols.com/news/events/

WELCOME TO NEW DEALERS

New Reliable Controls Authorized Dealers



Automatización y Control de Edificios (BAS)

Azteca Controls
Ciudad de Mexico, Mexico



Nexgen Automation, Inc.
Harrisburg, PA, USA

Ding Cheng Energy Technology, Ltd.

Ding Cheng Energy Technology, Ltd.
New Taipei City, Taiwan

NEW TRAINING CENTER IN SINGAPORE

Reliable Controls Continues Expanding in Asia Pacific

Reliable Controls is pleased to announce the official opening of the company's new, operational office and training center in Singapore.

Jacob Sng, Regional Sales Manager Southeast Asia, and Vivek Shrivas, Application Engineer Asia Pacific, moved their operations into this new space, and two training courses have already been successfully conducted.

The space consists of a small waiting area, a kitchen, washroom, an office for three staff, and a training area for seven students and an instructor. Located at 81 UBI AVENUE 4 #08- 12 UB.ONE, SINGAPORE 408830, the new training facility is within walking distance to the Tai Seng Station (CC11) on the MRT Circle Line (orange) and conveniently located in close proximity to a variety of food courts. Reliable Controls is delighted to now have a base of operations in this part of the world, with expectations to expand the Reliable Controls Authorized Dealer network across Asia Pacific.



NEW RELIABLE CONTROLS BRANDED PRODUCTS

Available Through Your Preferred Authorized Dealer



Peter Ostrom, Firmware Developer, models the two-toned Men's Softshell Vest.

Debbie Knobel, Senior Accounting Administrator, and Daniel Chaboya, Web Developer, model the Softshell Jacket, available in men's and women's in both blue and black.

Kent Gorrie, Webmaster, models the professional Men's Dress Shirt, a Calvin Klein, non-iron, steel gray shirt available in a variety of sizes. He is holding the new double wall, copper vacuum insulated, thermal bottle.



1. Ceramic mug in green with white exterior and gloss interior
2. Double wall, copper vacuum insulated, thermal bottle
3. High performance Flexfit twill cap
4. Insulated Koozie beverage holder



Jenny Wagner, Marketing Assistant, models the Women's V-Neck Pullover, a classy, professional sweater available in charcoal or black in a variety of sizes. She is holding the new ceramic mug in blue with white exterior and gloss interior.

Employee Profile



PEOPLE YOU CAN RELY ON

Lany Larsen: Prototype & Documentation Coordinator

Lany Larsen has been with Reliable Controls for approximately 13 years. While she currently inhabits the role of Prototype & Documentation Coordinator, she has held several other positions in her time with the company. Originally starting as an Assembler, her first position allowed her to become familiar with the production process, the industry, and with Reliable Controls. She left the company for a short time, and was asked to return in 2004. Since then, Lany has held several positions within the Production department in addition to her current role. In her time with Reliable Controls, she has worked her way up to a level that reflects both her expertise in production and her constantly evolving skill set.

Originally from the Philippines, Lany moved to the West coast of Canada with a degree in Elementary Education. Due to the differences in educational recognition in Canada, she decided to change fields. Seeing an opportunity in the medical technology industry, Lany pursued certification in medical terminology as part of a Pharmacy Technician program to gain employment with a company specializing in vascular engineering. It was there where she was first exposed to International Standards (ISO), which encompass certifications that she helps manage at Reliable Controls. She then worked for a fibre optic technology company, where she gained experience in training and manufacturing before arriving at Reliable Controls.

After her first role at Reliable Controls as Assembler in the Through-Hole department, Lany was

asked to start assisting her supervisors and take on more of a team leader role, issuing kits to production, training new employees, performing quality control, updating training data systems and matrixes, and helping with tasks related to ISO certification. Before the company had a Human Resources department, Lany partially filled that role, helping new employees with training and coordinating all of the related documentation. In order to upgrade her skills as she progressed through the company, Lany took Six Sigma courses related to quality control, as well as a course in Fundamentals of Supervision and Management.

In her current position, Lany has several main responsibilities, primarily around prototype production. She completes all documentation for changes, checks the status of prototype product runs, and updates working instruction documentation with new imagery and information. She must adhere to the company's ISO goals; ISO is one of several certifications that Reliable Controls maintains.

Specific challenges in her role are the day-to-day demands of updates to maintain accurate working instructions, and ensuring that the instructions are uniform. Due to the diversity of the company, Lany keeps the work instructions concise and simple to understand. In addition, she converted all instructions from hard copy format to be electronically accessed. Her knowledge and understanding of production processes, electronic manufacturing, and the ISO environment are huge assets to her role as related to prototype coordination. Working instructions are a large part of this role, and Lany maintains the equivalent of several hundred binders filled with accurate information about each product.

Keeping projects on schedule and employees informed on documentation is an integral part of Lany's work. She communicates with various departments, uploads documents to the Quality and Environmental Management System, and must ensure a high level of accuracy and attention to detail.

"Lany is one of our key team members in Manufacturing because she is responsible for

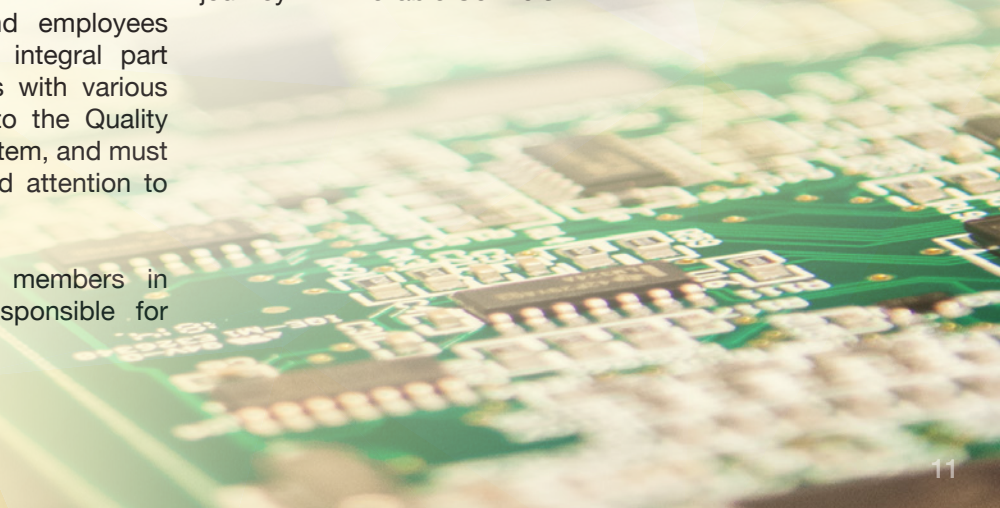
coordinating critical updates or changes to our processes, which we all rely upon," says Bryce McCaughey, Production Manager. "She has an incredible attention to detail and years of experience, which greatly helps her succeed in her role. She makes sure all of our manufacturing documentation is up to date and does a great job helping move prototype builds through Production. Lany is a pleasure to work with and we're lucky to have her as a part of our team!"

Lany is not only dedicated to her career, but also to her family. Her husband works as a Marine Engineer in the Department of National Defence (DND), and she has two boys, age 12 and 9. She calls them her "Reliable Controls babies", as her family has grown alongside her career. Lany's free time is spent helping out in Sunday school, trail hiking, and encouraging her kids' hobbies in swimming, skating, and music.



An accomplished singer herself, Lany has been quite active in music for much of her life. "I love music, I grew up with music, and part of my passion is music," she says. She describes singing in church bands and choirs for both fun and as fundraisers, and has organized concerts to raise money for good causes. Her personal philanthropy is a great fit for Reliable Controls, where the company culture celebrates a high quality of personal life with values that include collaboration, integrity, quality, and great ideas.

Lany has a lot of appreciation for her career, which ultimately, is a direct result of her own planning and hard work. "I recognize and appreciate where I am right now," she says, continuing, "I value integrity and honesty and I appreciate the opportunity to be surrounded with many people who have so much to offer. I love to listen and learn and I embrace my journey with Reliable Controls."



GILLAM TOWN CENTRE

GILLAM, MANITOBA, CANADA

RETAIL

FACILITY DESCRIPTION

Gillam Town Centre is a multi-phase, multi-year, multi-programmed project designed to strengthen the liveability and physical core of Gillam, a small urban settlement South of Churchill, Manitoba. As the epicentre of Manitoba's burgeoning hydroelectric economy, the population is expected to more than triple in the next 15-20 years.

PROJECT DETAILS

In terms of networked hardware, the operator workstation (OWS), MACH-ProWebSys™, and MACH-ProSys™ reside on a BACnet® IP network along with the chiller. A dedicated Internet connection is provided to the MACH-ProWebSys™.

Mechanically, each space is served by one or more fan coils. Cooling is provided by a central chiller plant and a distributed chilled water system. The fan coils are equipped with controlled electric heaters. Fresh air is provided to the building by two heat recovery ventilators (HRVs), equipped with electric heating coils and humidifiers. Humidity is controlled by the SPACE-Sensor Enocean's built-in humidity sensors throughout the building, crawlspace, and mechanical room connected ventilation systems.

This project is unique not only due to its remote location, but also because the soffits of the building are utilized for sprinkler piping. The soffit is heated through fan coils located in the crawlspace and the temperature in the soffits is controlled and alarmed to avoid freezing. Remote access was critical in the commissioning stage of the project. Full Internet access to the system and OWS was utilized for technicians to tune and troubleshoot the system remotely.

The simplicity of the design of the mechanical system combined with thorough commissioning procedures has allowed this system to run essentially flawlessly from the turnover date.

To learn more about projects using Reliable Controls® visit www.reliablecontrols.com/projects/overview



PROJECT TYPE:
New Construction

INSTALLATION TYPE:
Chiller, Fan Coil Unit, Humidifier, Dual Core High Efficiency HRV, Perimeter Soffit Heating

TOTAL AREA:
27,000 m² (290,628 ft²)

EQUIPMENT INSTALLED:
1 MACH-ProWebSys™
2 MACH-ProSys™
2 MACH-ProPoint-IO™
1 MACH-ProZone™ -88
25 SPACE-Sensor™ Enocean

NETWORK:
EIA-485, Ethernet

INTEGRATION:
BACnet®

TOTAL SYSTEM POINTS:
225 points

RELIABLE CONTROLS® DEALER:
Tri-Star Automation, Inc.



www.reliablecontrols.com