



WHY EDUCATIONAL  
partnerships matter

WHY COLLABORATION  
matters to our dealers



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# RUNtime

The official quarterly magazine of Reliable Controls® Corporation

Q1-2023

10 ways we deliver  
quality through  
collaboration



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controls

# PRESIDENT'S MESSAGE

## Green buildings on Vancouver Island



Tom Zaban, P.Eng.,  
LEED Green Associate

At a recent ASHRAE chapter meeting on Vancouver Island, where Reliable Controls is headquartered, a young engineer in training started a conversation with me, and before I knew it, we were discussing green buildings on Vancouver Island. She asked me if I knew the date of the first LEED certification on the island. Having been an active participant in green buildings for many years, I was surprised—and a bit disappointed—that I didn't know the answer off the top of my head. But I certainly knew where to look to find it.

The [Canada Green Building Council](#) (CaGBC) maintains a detailed [project database](#) of all registered and certified LEED and Zero Carbon projects in Canada. As of this writing, there are 142 registered LEED and Zero Carbon green buildings on Vancouver Island, of which 105 have achieved one level of certification.

Once a project is registered, it can take months, even years, to achieve certification. Figure 1 shows green building registrations on Vancouver Island began in 2001, but certifications started gaining momentum only around 2011.

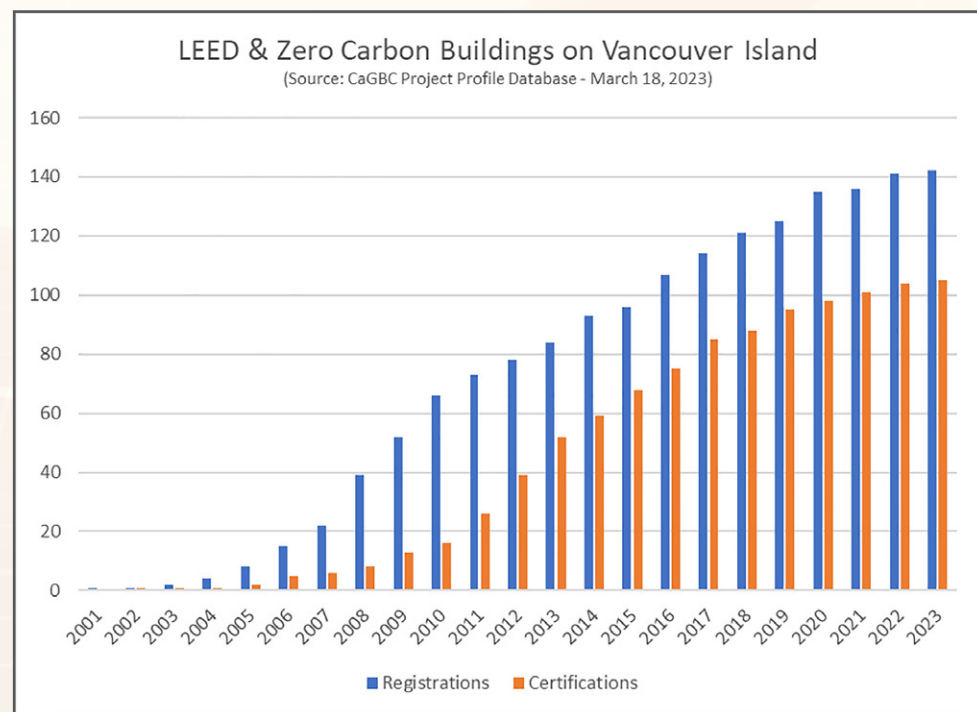


Figure 1

The LEED rating system ranks a green building's design using four ascending levels of certification: certified, Silver, Gold, and Platinum. Zero Carbon buildings' design and performance are either certified or not. On Vancouver Island, 57 (54.3 percent) of the 105 certified LEED and Zero Carbon buildings have achieved LEED Gold (Figure 2).

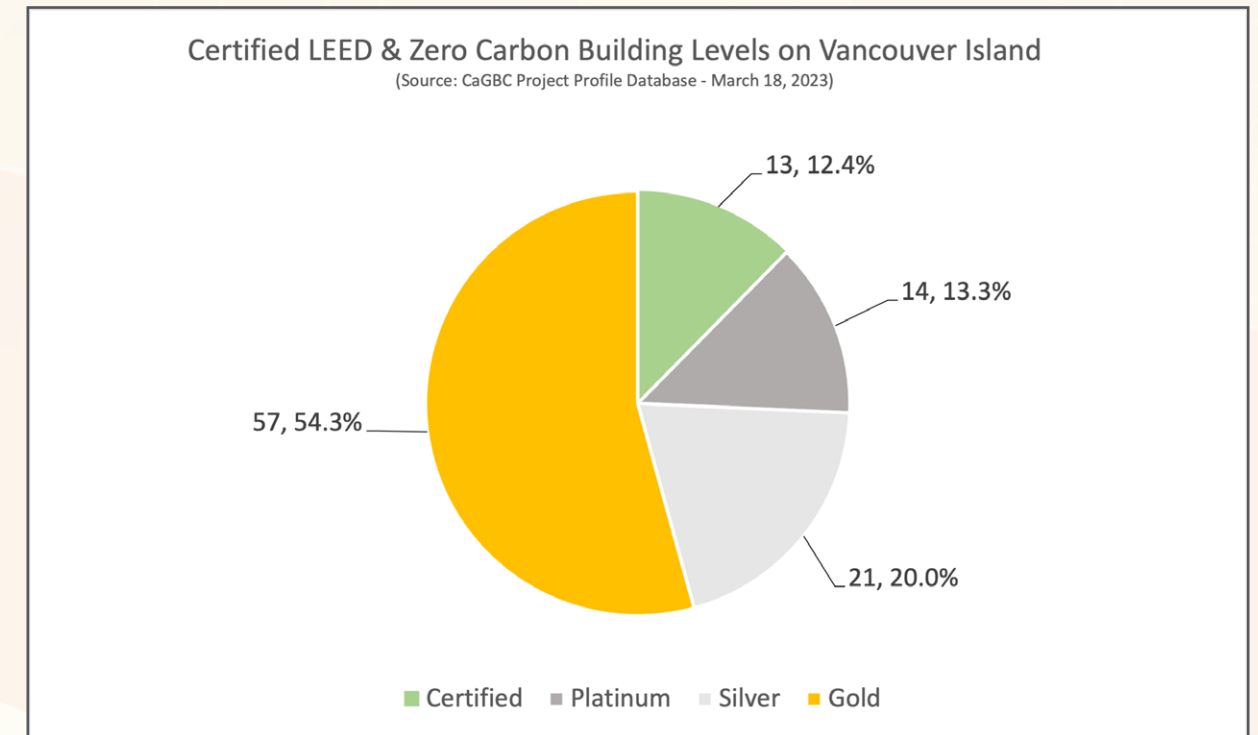


Figure 2

As you might expect, the certified green buildings on Vancouver Island include every type of building. Office, education, mixed use, residential, and retail buildings comprise the majority of certified buildings (Figure 3).

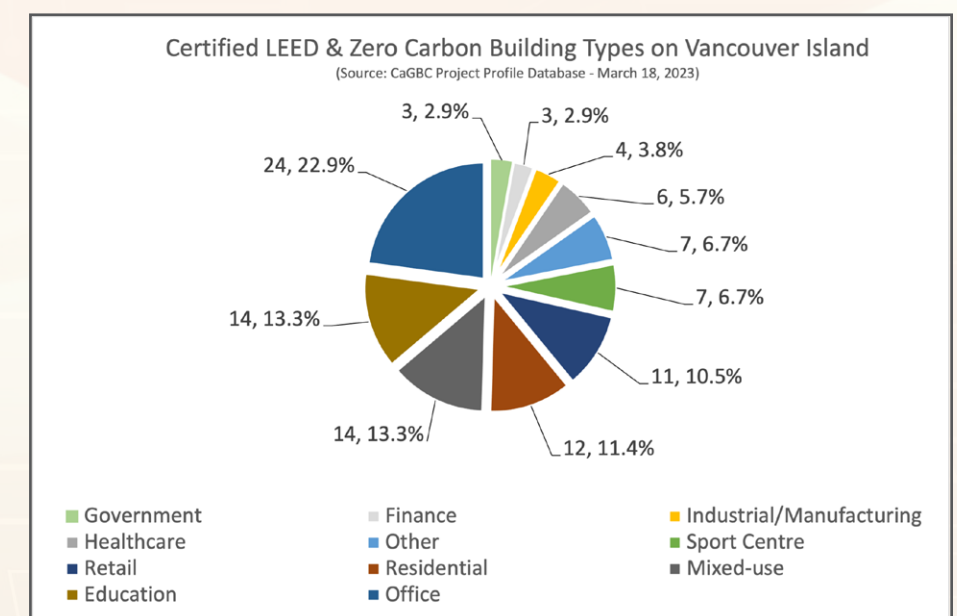


Figure 3



A common industry benchmark to quantify building energy performance is energy use intensity (EUI), typically expressed in units of kWh/m<sup>2</sup>/yr. If the 105 certified green buildings on Vancouver Island had been designed and constructed using today's conventional (non-green) methods and codes, they might have achieved a reasonably respectable EUI of 160 kWh/m<sup>2</sup>/yr. Multiplying this EUI by each building's floor area as reported in the CaGBC profile database, the 105 buildings would have collectively consumed about 113.5 GWh of energy for each full year of operation.

Since these buildings were actually certified green, we can estimate their aggregated energy savings. Assuming an EUI of 110 kWh/m<sup>2</sup>/yr for LEED- and Zero Carbon-certified buildings, 90 kWh/m<sup>2</sup>/yr for LEED Silver buildings, 70 kWh/m<sup>2</sup>/yr for LEED Gold buildings, and 50 kWh/m<sup>2</sup>/yr for LEED Platinum buildings, the 105 buildings would have collectively consumed only 49.1 GWh of energy each year. This means they save approximately 64.4 GWh of energy for each full year of operation! Assuming the energy source for each building is evenly split between electricity and natural gas, the certified buildings on the island prevent 6,125,540 kgCO<sub>2</sub>e, or approximately 6,126 metric tons, of carbon dioxide equivalent gas emissions from being released into the atmosphere each year—the same as removing 1,332 passenger vehicles from Vancouver Island roads.

So after a long-winded response to the young engineer's short question, I learned the first LEED registration on Vancouver Island was submitted by the Vancouver Island Technology Park in Victoria, BC. This green facility was registered on May 5, 2001, earned the island's first LEED certification on February 4, 2002, and has been in continuous operation since, making a positive annual contribution to Canada's greenhouse gas emissions reduction plan.

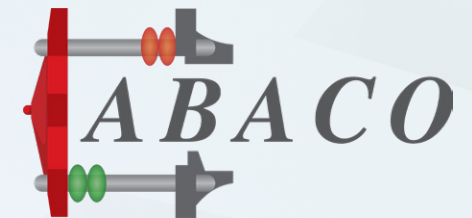
How many certified green buildings are in your area?  
Visit your local green building council's website to learn more.



# WELCOME

New Reliable Controls Authorized Dealers

**Abaco Hydronics**  
Bogota, Colombia



**Empowered Building Controls—NYC**  
New York, New York, United States  
[empoweredbuildings.com](http://empoweredbuildings.com)



**Empowered Buildings**

**Energy Management Systems Pvt Ltd**  
Westan, Sri Lanka  
[ems.lk](http://ems.lk)



**Johnson Barrow—Oregon**  
Portland, Oregon, United States  
[jbarrow.com/oregon1](http://jbarrow.com/oregon1)



**Wade Company**  
Little Rock, Arkansas, United States  
[wadecoinc.com](http://wadecoinc.com)



Reliable Controls sales, installation, service, and support are all performed by a growing network of independent, factory-certified Authorized Dealers. Each dealer is committed to the green building controls industry and to providing total customer satisfaction.  
To locate an Authorized Dealer near you, visit the dealer locator on the Reliable Controls website.





# 10 WAYS WE DELIVER QUALITY THROUGH COLLABORATION

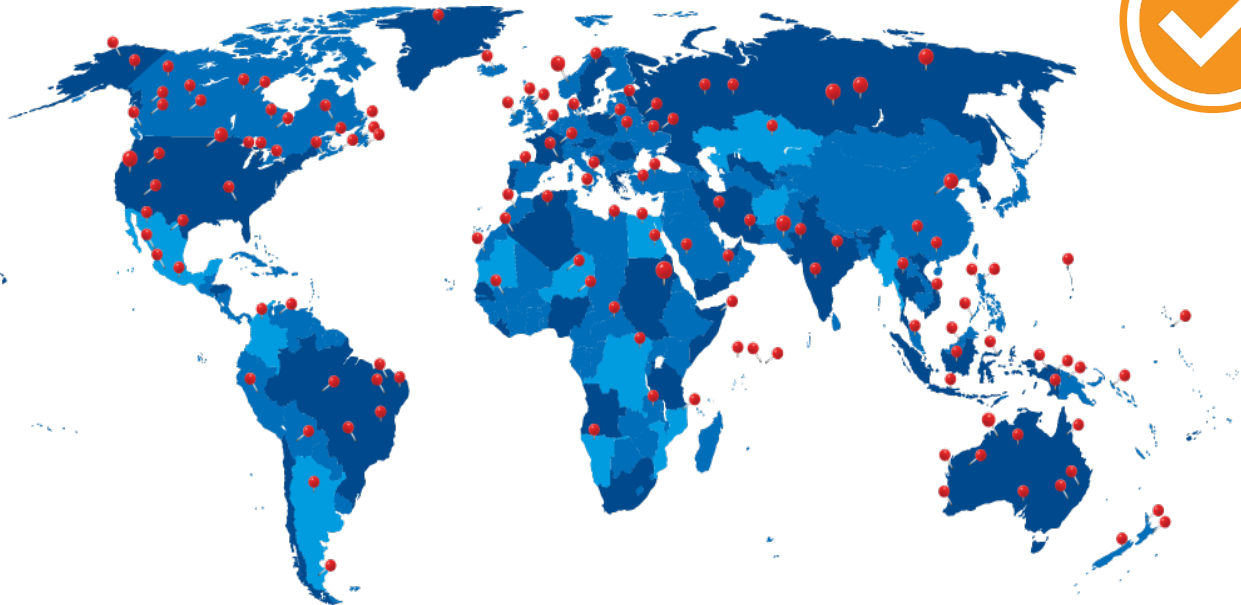
At Reliable Controls we like to do things differently: Customer satisfaction is the measure of our success. Doing right by building owners and operators means we invest heavily in our Authorized Dealers—the people entrusted with the responsibility to engineer simple, flexible, sustainable building automation solutions tailored to customers’ needs. It comes down to collaboration. We support our dealers, and they support each other, so our customers benefit from the expertise and passion of hundreds of professionals. Everyone in the Reliable Controls community cares about making a difference, one building at a time.

## 01 | HANDPICKED DEALERS

The Reliable Controls Authorized Dealer network is a worldwide group of talented, independent controls contractors. We’re proud to work with them. And we’re picky about who we invite into the fold. Why? Because our customers deserve the best.

Our collective success flows from aligned values and trust. To become a Reliable Controls Authorized Dealer, people need to demonstrate a commitment to business sustainability and

the ability to provide a high level of customer service. For example, does the business include qualified application engineers, able to quickly solve technical challenges? How does it engage with industry peers to foster relationships, contribute as subject-matter experts, and stay current in the field? What’s its succession plan, and how will it ensure long-term customer care? Dealer status is hard to obtain and annually reviewed.



## 02 | TRAINING

When you pick Reliable Controls, you get people and technology you can rely on. Factory-certified training is the first step in ensuring Authorized Dealers provide customers with exactly that: reliability. People do better when they know better. In addition to intensive instructor-led training, we provide online learning opportunities for dealers and building operators. Our growing library of training videos provides easy, bite-size instructions on how to get the most out of RC-Studio®, RC-WebView®, and the MACH-ProWeb®.



One of our core principles is “a highly-trained customer is a long-term customer.” The Reliable Controls Authorized Dealer training keeps our techs at peak performance, and the operator training greatly enhances our customers’ abilities to take full advantage of all the features and benefits of their building automation system. A significant portion of our repeat business comes from our highly trained customers.

Matt McMillen, senior controls engineering specialist at Ameresco (United States)  
A Reliable Controls Authorized Dealer since 2012

## 03 | APPLICATION ENGINEERING

Even when Authorized Dealers receive the best training, there’s still room for more coaching. Who better to offer 24-hour support than a team of application engineers with field experience? Dealers know they can count on these experts

to offer an extra perspective and complement their know-how when faced with complicated scenarios. Customers are often impressed by how much information they receive because of the extra level of factory support.



The freedom to ask anything, without feeling like we’ll be judged, is part of the respect we experience with Reliable Controls.

Adsinar Cajar Bocek,  
general manager at COPANAC (Panama)  
A Reliable Controls Authorized Dealer since 2016





## 04 ► TECHNICAL SUPPORT

According to Reliable Controls Authorized Dealers who also work with other brands, our technical support response time is the best in the industry. Samuel Goulet, our tech support supervisor, describes his team as “relentless problem-solvers who take away pain.” It’s about more than providing our dealers with solutions; we cultivate relationships so they feel appreciated. There truly are no stupid questions, and no issue is too small or big for

us to spend time on. Our support starts with active listening and builds by involving key knowledge holders. The entire R&D team is available to help resolve complex problems. It’s not uncommon for a dealer to speak directly with a senior engineer who has decades of experience with our products. Why does this benefit customers? Problems are solved quickly because dealers trust every call for help will be answered.



*When I first started my company, we didn’t have any customer support or any help at all. The stress I was under put a lot of strain on my family, too. Twice I thought my wife would leave me. She said if things continued the same way for another 2 years, we wouldn’t be together. I agreed and said if nothing changes, I will probably die of a stroke. And then I partnered with Reliable Controls. There isn’t just one time they have come through for me; they make my life better every single day. Just knowing I have a team of technical experts—the people who actually built the products—available to help me with any question I have... That makes all the difference. I sleep at night because I feel supported. It’s more than just business; it’s about having inner peace. My wife is also very happy!*

*Alvaro Solis, general manager at Solmatec (Costa Rica)  
A Reliable Controls Authorized Dealer since 2018*



## 05 ► SALES COACHING

Reliable Controls is unique in how we promote sales. To start with, we don’t impose sales quotas on our dealers. Regional sales managers (RSMs) talk with each of their dealers every year to ask what their goals are. Not all dealers want to (or are able to)

grow at the same rate. Rather than communicate expectations, RSMs ask, “How can I help?” Our sales team are more like personal coaches, encouraging dealers to become their best selves.



*We continue to align with Reliable Controls because of the support we get. We continue to align with Reliable Controls because of the support we get. With most other companies the support isn’t there, but Reliable Controls is always just a phone call away—whether it be in Canada, in Singapore, or directly with our RSM. We have a great relationship with Reliable Controls, from the sales team to the technical team. They’re always looking to get the best outcome for us.*

*David Connolly, director at Rycon Electrical Services (Australia)  
A Reliable Controls Authorized Dealer since 2018*



## 06 ► SHARING KNOWLEDGE

“Apprenticing makes the industry better,” says Michael Richards, senior controls tech at Stratus Designs. When peers call him for advice—even those working for another company—he makes time to help them. Skilled controls technicians are hard to come by. Sharing knowledge is one way Authorized Dealers can feed collective abilities, which ultimately benefits customers.

Reliable Controls takes every opportunity to provide dealers with technical insights, industry news, and company updates by hosting webinars and regularly sharing content through the [Resource Newsroom](#), our online forum. Check it out!

RSMs regularly organize meetings with their dealers to offer workshops tailored to their region’s needs. On a far larger scale, Interconnect, our bi-annual conference, unites Reliable Controls experts with Authorized Dealers from around the world for a week of professional development and bonding.



*I’ve been to two dealer events (Queenstown and Hobart). It’s awesome to catch up in an environment like that, to hang out with the Reliable Controls leadership team, and to talk with other dealers around Aussie. It was great to share challenges and offer Roland [former Reliable Controls president] feedback directly and have him take notes and really listen. It makes it all worth it to know they’re really invested in the company, in their products, and in the people—in us!*

*Todd McBride, general manager  
at IES Group (New Zealand)  
A Reliable Controls Authorized Dealer since 2015*



## 07 | NETWORKING EVENTS

Lunch-and-learns, trade shows, and conferences are all perfect opportunities for Reliable Controls experts to meet customers and consultants in person. Increased brand awareness builds trust, which in turn fosters strong relationships. Networking events leave

the door wide open for people to approach us with questions and enjoy casual conversations that often yield interesting opportunities—both for customers and our Authorized Dealers.



*Trade shows have given us the opportunity to get in front of customers we wouldn't otherwise have been able to meet. We've generated some key relationships over the years that blossomed into a lot of work for all our branches. Robb Shipley, our RSM, joins us at school board and hospital trade shows because he knows those are two of our biggest customers and the markets we're interested in developing. That's been very beneficial.*

*Jo-Anne MacLean, Calgary branch manager at SERV-ALL Mechanical Services (Canada)  
A Reliable Controls Authorized Dealer since 1987*

## 08 | MARKETING MATERIAL

For some it's an afterthought; for others it's non-existent—marketing is rarely top of mind for controls companies who generate business through word of mouth and handshakes. Some of our Authorized Dealers run small operations of three or four people, all of who dedicate their time to doing the work instead of promoting it. Reliable Controls offers support by extending our marketing power to the dealer network. Project profiles showcase customers' buildings and

the solutions Authorized Dealers provided. This section of the Reliable Controls website sees the highest traffic, second only to the Dealer Locator page. Project profiles gain even more visibility and engagement when we promote them on our social media channels and link them to articles in the Resource Newsroom. We're proud of the work our Authorized Dealers do, and want to tell the world about it.



*Reliable Controls has given Stratus the invaluable opportunity to jointly develop marketing content for the greater good of all Authorized Dealers while also showing dealers and customers who we are and what we do. Without the fun dynamic of back-and-forth questions we wouldn't have been able to create such worthy content. Reliable Controls has consistently put in extraordinary efforts to help us with professional photography and access to brilliant content editors. Working with the marketing department has helped the Stratus team grow.*

*Adam Clarke, CEO of Stratus Designs (Canada)  
A Reliable Controls Authorized Dealer since 2020*

## 09 | FOCUS GROUPS



Did you know customers and dealers play a role in the R&D of Reliable Controls products? We don't create anything without considering what dealers need and how new features and products will benefit customers. Dealers are the main point of contact for customers. Your feedback reaches us when dealers speak with their RSM, interact with technical support and application engineering, or directly influence R&D by joining focus groups. Dealers advocate for the things that matter to you. Never be shy to share your thoughts.

*Reliable Controls demonstrates they respect their dealers. That's really important to us. They consider everything we say; they really listen to us and try to do everything within their means to help us. They are very humble. That gives us the feeling of being at home or part of a close-knit group.*

*Adsinar Cajar Bocek, general manager  
at COPANAC (Panama)  
A Reliable Controls Authorized Dealer since 2016.*

## 10 | EDUCATIONAL PARTNERSHIPS

As the demand for building automation grows, controls contractors are struggling to keep up. There is more work available than they have capacity to take on. Your next project might be waitlisted because of staff shortages. Nobody wants that to happen. Reliable Controls is helping grow the workforce by supplying technology to colleges and universities that collaborate with our dealers to include

building automation in their curriculum. These educational partnerships frequently lead to co-op positions and future employment within the dealer network. It's a highly focused way to recruit technicians before they join the marketplace.



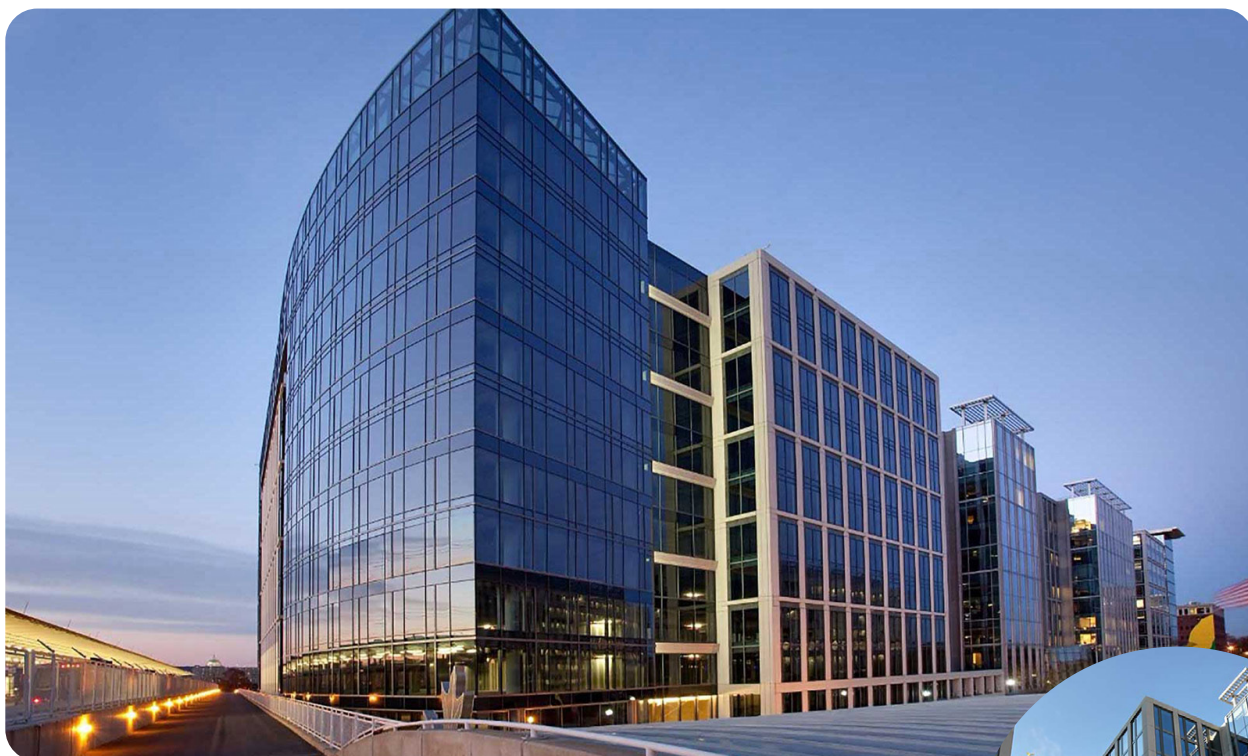
**Want to learn more about education partnerships? See page 16 for a full article on why they matter.**

**Our value is in more than the technology we create; we're different from other brands because we care about the people we work with and those who work with them. Collaboration breeds quality, loyalty, and a deep sense of commitment through accountability. When you pick Reliable Controls, you get a commitment to advance the automation industry.**



# Project profile Constitution Square

WASHINGTON DC, UNITED STATES



Constitution Square covers a full city block just north of Union Station and the US Capitol Building in Washington, DC. Three 12-story office LEED-certified buildings accommodate thousands of government and private-sector employees, several Sensitive Compartmented Information Facility (SCIF) rooms, and Class A office space for a mix of private-sector tenants with green space and integration to the adjacent Metro rapid transit station. All three buildings include first-floor retail space and below-grade parking.



**Total area**  
• 176,516 m<sup>2</sup> (1.9 million ft<sup>2</sup>)

**Total system objects**  
• 16,000

Authorized Dealer Pritchett Controls installed a Reliable Controls building automation system to control the base buildings and tenant mechanical systems in buildings two, three, and four at Constitution Square over six massive construction projects that began in 2008 and were completed in 2019.

The span of development for this project highlights the benefit of backward compatibility built into all Reliable Controls products; over the course of 11 years, Pritchett Controls seamlessly integrated two generations of Reliable Controls devices without the need to replace thousands of existing controls simply because a newer-generation product wasn't compatible.

Pritchett Controls installed more than 4,200 Reliable Controls devices to control 176,516 m<sup>2</sup> (1.9 million ft<sup>2</sup>) of floor space in the three buildings. Earlier-generation controls in the facility include MACH1, MACH2, and MACH-Air controllers along with SMART-Sensor devices. As the project progressed, Pritchett Controls integrated hundreds of second-generation MACH-Pro controllers and expansion modules. Each of the buildings has a large chilled-water plant that serves enormous custom rooftop units as well as variable air volume units with electric heat. Every tenant floor has two integrated units that serve computer rooms. In building four, Pritchett Controls integrated a third-party airflow measurement station to monitor airflow for each fan in the fan wall. In addition, buildings three and four have rainwater cisterns that harvest, store, and reuse rainwater to keep the cooling tower water sumps full.

## Integrated equipment

- Chillers
- Air-conditioning units
- Variable frequency drives
- Heat pumps
- Air-handling units
- Water-source heat pumps
- Airflow measurement station
- Electrical switchgear

Pritchett Controls used the power of RC-Studio software to integrate all mechanical equipment into the building automation system and optimize control strategies for comfort 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 in this complex system before they become a problem.

Today facility operators access the automation system using RC-WebView software, a time-saving browser-based building management solution that combines the power and accountability of enterprise tools with a simple interface. RC-WebView provides scalable visibility and system control at a glance. And with RC-Archive software, stakeholders fully own and control building data and benefit from a robust, dependable record of performance.





Three Constitution Square was recognized with a U.S. Green Building Council National Capital Region Award of Excellence for Core and Shell and a NAIOP Maryland/DC Best Urban Office Award. Building two achieved LEED Gold certification, and buildings three and four are expected to be certified LEED Platinum. To achieve LEED certification, a project earns points (60–79 points for Gold, 80+ points for Platinum) by adhering to prerequisites and credits that address carbon, energy, waste, water, transportation, materials, health, and indoor environmental quality.



“The Constitution Square project was a large installation that required numerous subnetworks,” said Peter Haber, vice president of business development at Pritchett Controls. “The scalability and architecture of Reliable Controls helped us provide the customer with a system that operates easily and efficiently.”



67 MACH1™ controllers



9 MACH2™ controllers



15 MACH2™ expansion cards



931 MACH-Air™ controllers



3 MACH-Pro1™ controllers



2 MACH-Pro2™ controllers



1,086 MACH-ProAir™ controllers



28 MACH-ProCom™ controllers



47 MACH-ProPoint™ Input/Output expansion modules



11 MACH-ProSys™ controllers



1 MACH-ProWebSys™ controller



80 MACH-ProZone™ controllers



1,988 SMART-Sensor™ devices



13 SMART-Space™ Controller devices

Better by design™

Explore other Reliable Controls projects: [reliablecontrols.com/projects](https://reliablecontrols.com/projects)



## WHY COLLABORATION MATTERS TO RELIABLE CONTROLS AUTHORIZED DEALERS

**Confidence.** When you’ve got it—in yourself, your team, and the products you work with—it’s a game changer. At Reliable Controls we’re not just in the business of creating building automation solutions; we’re also inspiring people to bring their own flair to applications. Reliable Controls can set up dealers for success by delivering quality hardware and software, but it’s what a dealer does with the technology that makes all the difference. We make it our business to instill confidence through collaboration. Here’s what a few of our Authorized Dealers say.

times now, and I never get the feeling that a question is too stupid. Tech Support is always there to help, which is a huge thing. As a dealer you want to be able to reach out anytime, or lean on them, which I do a lot. Being remote in New Zealand, we never get to see these people. Having the video calls is kind of cool.”



Todd McBride, general manager  
at IES Group (New Zealand)

A Reliable Controls Authorized Dealer since 2015



“The technical support is awesome. They always answer calls quickly and efficiently. We once had an issue on a site 5 hours away. One of my guys went to the site and we Teams called in, but then I had a problem with software licensing on the server. It being a secure site made it hard to access. So I sent an email to the Tech Support team at Reliable Controls, and within 5 minutes I got a response. Lyam offered to do a screen share, so he took control of my computer and took control of the other guy’s computer (at the site), and we were able to get the problem resolved. It’s pretty awesome we were able to achieve the results and not have to worry about waiting 16 hours for someone to get back to us. It was pretty instant! I’ve dealt with Lyam a few



“One of our clients requested information for their QA documentation about how a particular feature within a sensor worked. I explained it to them as best I could but wanted more information so posted a question on the Reliable Controls eForum. Greg Bates, from application engineering, was so helpful in describing exactly what goes on within the sensor and how the feature works. He also put me in touch with Lyam Witherow in the technical support department. I sent Lyam data logs from the sensors, which he interrogated to see



exactly what was going on within the sensors. We emailed back and forth for a number of days. Both Greg and Lyam provided me with so much in-depth data that I could formulate and send to the customer, and it blew the customer away. They were so impressed by the support Reliable Controls gave us to provide them with exactly what they had asked for and more. It was really helpful!”



Trevor Lucey, managing director  
at LCS Control Systems (Ireland)  
A Reliable Controls Authorized Dealer since 2005



“It’s a product and a company that has a solid reputation and something you can be proud to stand behind. It doesn’t hurt that it’s a Canadian manufacturer, either—customers always like that side of it. The people at Reliable Controls set the company apart. Everyone I’ve met has always been professional, knowledgeable, and very passionate about what they do. I remember one of our technicians calling tech support, and Roland—the owner of the company at the time—answered the phone. If that’s not dedication, I don’t know what is.”



Jo-Anne MacLean, Calgary branch manager  
at SERV-ALL Mechanical Services  
A Reliable Controls Authorized Dealer since 1987



“In the early days of my company, when I was still working with another vendor, I worried I wasn’t going to live beyond age 45. Sometimes I’d run into huge technical problems while working on a system, and I’d figure it all out in the end, but it was really stressful. I don’t have that stress anymore now that I work with Reliable Controls. Their customer support is great!”



Alvaro Solis, general manager  
at Solmatec (Costa Rica)  
A Reliable Controls Authorized Dealer since 2018



“We see the culture Reliable Controls nurtures—one of trust, candid communication, and a dedication to helping us grow—and we’ve fostered that culture in our own team so our clients also benefit the way we do.

“That missing spark, which Reliable Controls now gives us, is something our clients were missing, too. When we look at controls systems that have been abandoned or not used efficiently to get the most out of them, we do what we can for our clients. We try to really empathize with our clients; we want to understand them and know where they’re coming from—not just financially but also their sustainability issues. We make sure our team understands the importance of not just focusing on the money side of things. I think a lot of our people have really changed for the better. Our clients respond to that every day, and we’ve become unique in the market because of it. In

addition to being very candid with our clients and trying to help them through all the issues they may have with their systems, we let them know if they want to do more—go further—that’s something we can support them with. We’re not going to block their progress by withholding information so they become dependent on us. On the contrary; we have opened up with our clients in the way Reliable Controls has been open with us.”



Adsinar Cajar Bocek, general manager  
at COPANAC (Panama)  
A Reliable Controls Authorized Dealer since 2016.





# 5 REASONS TO MONITOR YOUR INDOOR AIR QUALITY



According to the World Green Building Council, we spend 90 percent of our time indoors. Given that statistic, it's clear the quality of the air we breathe in buildings can dramatically impact our health and well-being. At Reliable Controls we believe sustainable buildings are a key component to reducing the health and environmental impacts of indoor and outdoor air pollution.

## 1 Improve comfort and productivity.

Research from the US Environmental Protection Agency (EPA), informs us that indoor air contains two to five times more volatile organic compounds than outdoor air due to chemicals found in buildings. This impacts human health, from eye and throat irritation to respiratory diseases and cancer.

And while you can't yet monitor the presence of a virus like COVID-19 in the air, you can measure a number of factors that affect the risk of viral transmission: temperature, humidity, and CO<sub>2</sub>. These air-quality measures are also linked to workplace well-being and productivity, so the better the air in your building, the better your occupants are likely to feel—and perform.

## 2 Save energy.

Excessive ventilation wastes energy. Ideally, a building's ventilation system provides just the right amount of air. Many ventilation systems, especially older ones, are based on constant air volume, which means they always operate at full capacity. By converting to a variable air volume system, you can optimize your energy efficiency with demand-controlled ventilation. The EPA found that a ventilation upgrade from constant air volume to variable air volume can achieve annual energy savings of 10 to 21 percent. Beyond that, with air-quality sensors, you have access to real-time data that informs when and where to efficiently deploy air filtration and temperature control.

## 3 Identify trends.

Integrating IAQ sensing technology into your building automation system means you can collect building data that helps you perform preventative maintenance and avoid system failures. By tracking pollutant levels continuously over time, for example, you can easily identify where and when to address changes in air-quality parameters. Long-term trends are almost impossible to detect with periodic spot sampling, which provides only a snapshot of data points at a particular time.

## AIR QUALITY INDEX

0–50	<b>GOOD</b> Air quality poses little or no risk.
51–100	<b>MODERATE</b> Health concern for people who have a very high sensitivity to air quality.
101–150	<b>UNHEALTHY FOR SENSITIVE GROUPS</b> Sensitive groups, young children, and older adults, may experience health effects.
151–200	<b>UNHEALTHY</b> Everyone may experience health effects; sensitive groups may experience more serious health effects.
201–300	<b>VERY UNHEALTHY</b> HEALTH ALERT: Everyone may experience more serious health effects.
301–500	<b>HAZARDOUS</b> EMERGENCY CONDITIONS: Entire population is likely to be affected.

<https://aqicn.org/scale/>

## 4 Spot problems.

Most people know IAQ sensors can warn building managers about safety issues like smoke or carbon monoxide. Did you know they can also tell you how much particulate matter is in the air? Or how many harmful volatile organic compounds are circulating in your space? IAQ data can help you determine where to focus cleaning, when to service equipment, when to change filters, and when to increase or decrease ventilation.

## 5 Earn building certifications.

IAQ monitoring is a crucial component in healthy building certifications like NABERS. To earn an Indoor Environment (IE) star rating under NABERS v2, for example, a facility must meet a minimum IAQ requirement intended to benefit occupants, maintain ventilation system equipment, and follow guidelines for mechanically and naturally ventilated spaces, in addition to other measures of indoor comfort.

# Better indoor air quality with Reliable Controls



MACH-ProView™ LCD controller



SMART-Sensor™ EPD

Sensors are a crucial component of any building automation system, collecting data inputs used to control ventilation, air filtration, and other equipment. You can depend on technologies from Reliable Controls to monitor the indoor air quality in your facilities. Whether you need to measure particulate matter, volatile organic compounds, carbon dioxide, relative humidity, or temperature, Reliable Controls has sensor options to suit a variety of needs. **Learn more at [reliablecontrols.com/IAQ](https://reliablecontrols.com/IAQ)**

Better by design™





## Why educational partnerships matter

Innovation—it rarely happens in a vacuum. Every day our teams collaborate to develop new technology, build and release products, market our efforts, and support Authorized Dealers to create change with every installation. Reliable Controls succeeds because of partnerships. We’re building a greener future, together. We’re committed to quality, and we’re driven by our desire to make a difference.

Where did it start, this *making a difference*? It stemmed from a mindset, nurtured by a man determined to challenge the status quo. Roland Laird, founder of Reliable Controls, wanted to design technology that not only met customer requirements but also anticipated future needs. He raised the bar in building automation systems because he listened first.

Reliable Controls continues to prioritize our customers’ needs; our designs and decision-making process are guided by our pledge to provide unwavering support through open and honest communication. We aim to empower others. To date, we employ 200+ people across five countries, our Authorized Dealers have installed technology in buildings around the globe, and we have taught more than 650 courses since 1995.

Our commitment to education stretches beyond dealer training. A technician’s foundation starts at school; their induction to our industry happens before they even choose which career to pursue. What exactly is the building automation industry, and how can they step into it? We have an opportunity to provide answers and shape their ambitions, one partnership at a time. Innovation has many faces.



Educational partnerships are a marriage of strengths: Dealers and RSMs identify colleges with established HVAC programs that would benefit from labs equipped with our cutting-edge technology. “Where possible we like to give back—to assist in the development of youths and in particular to encourage growth in STEM and the building trades,” says Levi Tully, executive vice president of sales. “There is a consistent dearth of qualified technicians and professionals in facility automation, so development in this area is good for the industry as a whole.”

The goal is for the partnership to be long-lasting, which requires a commitment of time and effort from all involved parties. Installation at the college lab, maintenance, and keeping instructor knowledge up to date contribute to course optimization. In return, the controls industry is able to recruit from a pool of talented technicians who join the field with a reliable foundation of knowledge.

How often do graduates join dealer ranks? How many recruits constitute a successful partnership? This varies from region to region. As Jim Bowie from Setpoint Building Automation says, there are no guarantees. Of the two colleges Setpoint supports, Jim has actively hired from one but has yet to hire any candidates from the other. He acknowledges that it’s not just his company he’s supporting; there are a lot of other companies in the area, and students also choose to work for them. He’s pleased to contribute to the growth of the industry and says a lot can be done. At Setpoint they aren’t just giving back; they’re paying it forward.

Reliable Controls hopes more Authorized Dealers will seek out partnerships. “We have not prescribed a limit to the number of programs or institutions with whom we would participate,” Tully says. “Instead, we evaluate the commitment of the institution and the dealer involved.” Considering our investment is not insignificant, we prefer a 5- to 10-year commitment. And besides, our controllers are built to last. Humber College is still getting mileage out of the technology it received decades ago, after graciously hosting the first Eastern Canada Reliable Controls Authorized Dealer training in its lab.

The evolution of our participation in industry education and the reciprocal partnerships we promote today recognizes the need for us to do more than just give; we want to actively support everyone involved. As our dealer network continues to grow, so, too, does the demand for qualified workers. Educational partnerships are an opportunity to help grow the next generation of technicians. Together we can showcase the multitude of careers available in the building automation industry.

Reliable Controls currently has 10 active education partnership agreements with institutions across Canada and the US, and one in India. Will yours be next? [Reach out to an Authorized Dealer](#) to discuss the possibilities for a partnership of your own.



## Project profile

# Kentucky State University

— KENTUCKY, UNITED STATES —



## CORE CONTROLS

Kentucky State recently began a capital planning proposal to build and renovate multiple buildings and construct a new central steam-heating plant with a main warehouse and facilities maintenance offices over several years. A significant part of the project was integrating equipment from multiple vendors into a single building automation system.

Kentucky State University is a historically Black public land-grant university in Kentucky with a mission to provide quality education founded in liberal studies, scholarly research, and public service. The university's land and physical properties include 41 building facilities at its main campus in Frankfort, a 296-acre agricultural research farm in southern Franklin County, and a 306-acre environmental education center in Henry County.

Kentucky State's vision is to prepare today's students as global citizens, lifelong learners, and problem solvers through its core values of a student-centered philosophy, excellence and innovation, ethical conduct, and social responsibility.

Reliable Controls Authorized Dealer Core Controls installed a new building automation system at the university during a recent campus upgrade.

Starting with chiller- and boiler-plant upgrades in 2019, Core Controls worked with Kentucky State to implement a Reliable Controls system in 28 buildings across the three campuses, which included the installation of more than 500 controllers and 129 other devices from Reliable Controls.

The backbone of the new building automation system is RC-Studio, an easy to learn and use BACnet Advanced Operator Workstation (B-AWS) software program that helped Core Controls improve the operational efficiency, occupant comfort, and sustainability on campus while integrating both Reliable Controls controllers and equipment from numerous other brands.



Core Controls installed more than 300 MACH-ProAir controllers to control the variable air volume system at the university. Today, dozens of MACH-Pro1, MACH-Pro2, MACH-ProCom, MACH-ProSys, MACH-ProView, and MACH-ProZone controllers, along with MACH-ProPoint expansion modules, are seamlessly integrated with the facility's mechanical equipment, including three chillers, cooling towers, air-handling units, fan-coil units, and even the ventilation hoods in the campus kitchen. And each zone now has a SMART-Space Controller or SMART-Sensor device that delivers occupancy status, which provides an excellent means to improve energy and operational efficiency throughout the facility.

"The installation quality and workmanship of all the controls is first-class," Kentucky State University project manager Jeremy Kelly said of

the work Core Controls did on this project. "More important than the installation quality, though, was Core's dedication to commissioning each piece of equipment and controller to make sure it was operating correctly per the sequence before they asked us to review it. Their attention to detail made our job commissioning these systems streamlined and efficient and ultimately ensured the project performs as promised."

The new building automation system is projected to save the university energy costs up to 27 percent per year. Together with Core Controls, Reliable Controls was happy to help Kentucky State continue to provide sustainable living, teaching, learning, and working environments for the university's students, staff, faculty, and guests—both today and in the future.

### Installed Reliable Controls hardware

- 24 MACH-Pro1™ controllers
- 11 MACH-Pro2™ controllers
- 319 MACH-ProAir™ controllers
- 20 MACH-ProCom™ controllers
- 32 MACH-ProPoint™ Input/Output expansion modules
- 32 MACH-ProSys™ controllers
- 12 MACH-ProView™ controllers
- 56 MACH-ProZone™ controllers
- 2 SMART-Net Relay™ devices
- 18 SMART-Sensor™ devices
- 109 SMART-Space™ Controller devices

### Installed Reliable Controls software

- RC-Studio software

### Total system objects

- 5,360

### Total area

- 1,238,338 m<sup>2</sup> (13,329,360 ft<sup>2</sup>)





Since 1986 Reliable Controls has developed a global network of highly skilled independent controls contractors called the Authorized Dealer network. The *RUNtime* magazine supports the collective efforts of the company to earn and sustain the most satisfied customers in the building automation industry. Information on the latest Reliable Controls products and services and insight into industry news and trends can be found in each issue of the *RUNtime*.

As a leader in the industry, Reliable Controls supports its Authorized Dealers to achieve their goals with a motto that together, they can be better by design.



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