



APPLE SELF STORAGE GUELPH, ON

Ontario's First Zero Carbon Certified Self Storage Facility

The story of Apple Self Storage's Guelph facility starts not with a ribbon cutting, but with contaminated soil and a piece of land most developers had written off.

The site at 110 Stevenson St. S. had sat dormant in a part of Guelph that had seen minimal development. The land required environmental remediation before a single structural element could go in. Contaminated topsoil had to be removed and properly disposed of, the kind of undertaking most developers sidestep entirely. Apple Self Storage and facility owner Canprop Inc. chose to take it on, with a clear goal: transform a neglected, unusable parcel into something that could genuinely benefit the community it sat in.

That decision set the tone for everything that followed. In December 2025, the Canada Green Building Council (CAGBC) awarded the Guelph facility Zero Carbon Building-Design (ZCB-Design) v4 certification, making it the first self storage facility in Ontario to earn the designation. It was the final chapter of a project that had been committed to environmental responsibility from day one.

A building designed to perform

The ZCB-Design standard, administered by the CAGBC, certifies buildings that eliminate operational carbon emissions through energy efficiency, renewable energy integration, and reduced embodied carbon in materials. It is a rigorous benchmark, one more commonly applied to hospitals, universities, and institutional buildings than to a commercial storage facility. That is what makes this achievement significant.

The Guelph facility's performance is measurable across every dimension the standard demands. Its embodied carbon intensity sits at 197.2 kg CO₂e per square metre, well below the ZCB threshold of 350. Energy use intensity (EUI) comes in 25.2% better than the National Energy Code of Canada for Buildings (NECB) 2020 reference building, the national yardstick for commercial construction efficiency.

Powered entirely by renewable electricity, the building has no combustion heating and no on-site direct emissions. A 185 kW rooftop solar installation does more than offset the building's operational energy needs: it generates surplus clean power and exports it back to the grid. The building envelope features 17,850 square feet of Kingspan K-Roc HF insulated metal panels in a Shadowline profile, finished in Driftwood colour, installed by Frost Building Systems Inc.

These panels deliver continuous thermal insulation through a single integrated system, eliminating thermal bridging while meeting the local architectural standards the city required. A 100,000-litre stormwater retention tank below the parking area captures excess water and disperses it into the groundwater system in a controlled manner, protecting the wetland that borders the site.

Why self storage?

Apple Self Storage is a family-owned Canadian company with more than 50 years of operating history and over 56 facilities across Ontario, New Brunswick, and Nova Scotia. Guelph was a deliberate development, not a retrofit.

The community profile was also a factor: the facility sits close to the University of Guelph and a planned residential neighbourhood, in a city whose residents place a high value on sustainable practices. True to its approach in every market it enters, Apple Self Storage has also embedded itself locally, partnering with the Guelph Food Bank and sponsoring the Guelph Rugby Football Club.

"There is a persistent belief in this industry that building sustainably comes at the cost of financial returns. This project challenges that directly," said David Allan, President of Apple Self Storage. "We're proud that our Guelph facility sets a new standard for what self storage can be. We achieved Zero Carbon certification with excellent project returns and delivered something the community values. Sustainable development, strong commercial returns, and community benefit all belong together."

That argument carries particular weight in a sector not historically associated with green building leadership. Self storage facilities have substantial envelope surface area, minimal operational staffing, and long asset lives. Getting the building envelope and energy systems right yields performance dividends that compound over decades. The Guelph project demonstrates that the building typology is well-suited to ambitious sustainability outcomes, especially when the commitment is made at the design table rather than added on at the end.

What began with the decision to clean up and build on a contaminated site ended with a certification that puts a self storage facility in the same company as the most sustainably designed buildings in the country.

CREDITS

The Guelph facility brought together the following Canadian design, construction, and financing partners.

Building Owner: Canprop Inc., Aurora, Ontario. **Management:** Apple Self Storage Management Ltd., Aurora, Ontario. **Lender:** Meridian Credit Union, Central Ontario Business Banking Centre, Barrie, Ontario. **Architects:** Cspace Architecture Inc., Bolton, Ontario. / Rick Brown and Associates Inc., Mississauga, Ontario. **General Contractor:** Fieldgate Construction Management Ltd., North York, Ontario. **Construction Manager:** Malleum Development Corporation, Toronto, Ontario. **Building Envelope Installer:** Frost Building Systems Inc., Brantford, Ontario. **Building Envelope Product:** Kingspan K-Roc HF insulated metal panels, Shadowline profile, Driftwood colour (17,850 sq. ft.). **Photographer:** Trina Koster, Guelph, Ontario. **Certification:** Zero Carbon Building-Design v4, CAGBC (Project 24315, December 2025.)

