

Cathedral Hill, Ottawa, Ontario



Cathedral Hill is a 21-storey luxury residential development located on Sparks Street in downtown Ottawa. It comprises 140 condominiums and 8 townhomes. The project is built to LEED Platinum standard.

Cathedral Hill is designed to be 50% more energy efficient than National code requires and encompasses a multitude of energy efficient systems and components. In addition to the selected components, the energy performance analysis covered a variety of systems such as:

- Several insulating wall assemblies to limit heat and cooling losses. The system selected perform 30% better than code requirement;
- Several windows assemblies including double-pane, triple-pane, low-emission coatings. The selection optimized the energy performance while allowing visible light to penetrate through.
- High efficiency central Variable Refrigerant Flow (VRF) Heat Pump system providing heating a cooling at a fraction of the cost.
- Energy recovery ventilators on the fresh air units.
- High efficiency condensing boilers,
- LED lighting fixtures throughout the common areas
- Solar wall for outdoor air preheat
- Low flow Water Fixtures and high efficiency appliances

Project Highlights

- Location: Ottawa, ON, Canada
- Architects: HOK Architects
- Developer: Windmill Development Group
- Year Built: 2012
- 21 stories; 40 condominiums
- Total size: 275,000 sq. ft. / 83,800 sq. m.
- Certification: LEED Platinum anticipated
- Energy performance: 50% better than National Code



Contact Us

To learn more about our services and how we can help you integrate energy efficiency, please contact us at:
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Responsibilities*

We worked with the design team and the client from early stages to establish the sustainability goals and energy efficiency targets.

Provided recommendations on energy conservation measures to achieve a LEED platinum certification level. Reviewed concept design and developed energy models to assess the design.

We have documented energy savings in line with the LEED® Canada-NC requirements. Software used IES-VE for load calculation, EE4 and EnergyPro for compliance analysis.

About us



Hayssam is a P.Eng licensed in Nova Scotia and Ontario. He holds a PhD in Building Energy Conservation with 17 years experience in the building services industry. His experience includes a wide range of skills including research and energy modelling as well as the selection and design of mechanical systems for buildings.

Hayssam identifies energy savings opportunities by assessing such factors as building envelope, site conditions lighting design, and HVAC systems.

* Experience prior to ESBES