

USGBC and LEED for Homes Mid-Rise...

If targets for greenhouse gas emissions reduction are to be met, decision-makers must unlock the potential of the building sector with much greater seriousness and vigor than they have to date and make mitigation of building-related emissions a cornerstone of every national climate change strategy. — Achim Steiner, Executive Director, UNEP (from a 2010 report)ⁱ

Soon after it was formed in 1993, the US Green Building Council (USGBC) began developing LEED for rating and certifying sustainability in the building industry. The goal of LEED is to fundamentally change how we design, build, and operate buildings and communities, through certification that honors levels of achievement in areas such as energy savings, water efficiency, CO₂ emissions reduction, improved indoor environmental quality, and stewardship of resources. ⁱⁱ

LEED for Homes is one of many the rating systems projects can use to become LEED certified and demonstrate their stewardship towards responsible, sustainable construction. This rating system is applicable for building design and construction projects for single-family homes and multifamily projects up to eight stories. ⁱⁱⁱ These homes are built to be healthy, providing clean indoor air and incorporating safe building materials to ensure a comfortable home. Using less energy and water means lower utility bills each month and less strain on our planet's finite natural resources.

LEED certification, measures a home's performance in the following eight categories: site selection, water efficiency, materials & resources, energy & atmosphere, indoor environmental quality, location & linkages, awareness & education, and innovation. A home that achieves LEED certification has been designed to use construction materials efficiently, minimizing exposure to airborne toxins and pollutants, and use significantly less energy. ^{iv} Following the certification process helps to increase the value and environmental integrity of your project.

For the end user, the operational savings achieved through a superior building envelope and highly efficient mechanical systems make 'going green' a no brainer. Studies suggest the initial construction cost of a home represents only 11% of a building's total cost, meaning that operational cost savings over time far outweigh initial expenditures on highly efficient technologies. In addition to the financial benefits, residents of The Eddy can rest assured that their new home has not come at the expense of the environment.



The Eddy's Commitment to Building Green With LEED...

Location & Linkages

- Built in an established neighborhood within walking distance of a multitude of community resources
- Built within walking distance to accessible open-space.

Sustainable Sites

- Erosion and sedimentation control measures have been put in place on site to limit the negative impact that our project has on the local community and City storm water infrastructure during construction.
- No invasive species will be planted on site.
- All plants onsite are drought tolerant and native plant species, which has eliminated the need for a permanent irrigation system and therefore a significant reduction in potable water use for irrigation.
- High albedo materials will be installed on hard surfaces where possible to reduce urban heat island effect.
- High albedo roofing materials have been installed used where possible to reduce roof heat island effect.
- A comprehensive storm water management system has been designed to limit the amount of run-off flowing off the site.
- Secure bike storage facilities will be provided for residents.
- The site is located within close proximity to a variety of alternative transportation options.



Water Efficiency

- Very high efficiency plumbing fixtures and fittings in all suites.
- Water efficient clothes and dishwashing appliances in all suites.
- Rainwater is harvested for reuse as greywater in water closets.

Energy & Atmosphere

- High performance building envelope and geo-exchange central plant system will provide residents with significant energy cost savings.
- No CFC or HCFC based refrigerants will be used in the HVAC system.

Materials & Resources

- Efficient use of construction materials on site.
- Low VOC adhesives, sealants, and coatings used throughout the building resulting in improved indoor air quality for residents.
- Locally produced, FSC certified, and high recycled content materials used where possible.
- Waste reduction strategies employed during construction to divert a significant amount of waste from landfills.



Indoor Environmental Quality

- Excellent air filters installed within HVAC equipment to optimize indoor air quality.
- Each unit is provided with fresh air via a dedicated energy recovery ventilator.
- Underground puzzle parking system stores cars once they have been turned off, eliminating air pollution below the living spaces.

i <http://www.usgbc.org/articles/reflections-global-imperative-green-building>

ii <http://www.usgbc.org/articles/rise-green-building-industry>

iii Ibid.

iv Ibid.



WINDMILL DEVELOPMENT GROUP
Suite 201, 1306 Wellington Street West
Ottawa, ON K1Y 3B2
613.820.5600
www.windmilldevelopments.com