

# BASSINS DU HAVRE

## **LEED Benefits**

### Environment

- LEED certified buildings have a lower carbon footprint. They reduce energy and water consumption by using energy-efficient mechanical and electrical equipment and highly efficient water-saving plumbing fixtures.
- Fossil-fuel based transit is minimized through access to bike paths, bike storage, parking spaces for electric cars and Communauto service, all of which contribute to reduce greenhouse gas emissions.
- These buildings also help reduce heat islands by using roofing materials with a low solar reflectance index and landscaping that absorbs heat.

### Well-being

- LEED buildings offer better air quality thanks to enhanced ventilation, efficient air filters and the reduction of harmful compounds found in certain substances (paint, sealants, adhesives, etc.).
- Rooms in LEED-certified buildings offer superior thermal comfort through a balanced heat recovery ventilation system.
- LEED certification promotes oversized windows, providing more natural light, which has a positive effect on mood and quality of life.

### Finances

- At Bassins du Havre, energy savings associated with LEED certification will be close to 31%.
- Recurring maintenance costs of LEED certified buildings are lower than similar non-certified buildings.
- According to a study in the United States, the resale value of LEED-certified homes is 8% higher than similar non-certified ones, and they are typically on the market for a shorter period.

### Confidence

- LEED certification provides assurance of the building's performance because the building was inspected by an objective third party.

SUSTAINABLE SITES	
Items	Bassins du Havre
Construction Activity Pollution Prevention Required	An erosion and sedimentation control plan was implemented.
Site Selection	The project is not developed on prime farmland, on ecologically sensitive land, on land specifically identified as habitat for any threatened or endangered species nor on land within 100 feet of any wetlands.
Development Density and Community Connectivity	The site conforms to the minimum development density requirement of 13,800 sq. m/ha (37,110 sq. m /ha) and is within 800m of at least 10 basic services (14) [confirm abbreviations and figures]
Brownfield Redevelopment	The site has been fully decontaminated.
Alternative Transportation: Low-Emitting and Fuel-Efficient Vehicles	In Block 1, three Communauto parking spaces and nine charging stations for electric vehicles are planned.
Site Development: Maximize Open Space	26% of the project's site area is dedicated greenspace (LEED certification requires a minimum of 20%).
Stormwater Design: Quantity Control	Stormwater will be used to fill the basins.
Stormwater Design: Quality Control	Stormwater used to fill the basins will be filtered.
Heat Island Effect: Non-Roof	All parking spaces will be underground.
Heat Island Effect: Roof	The roofing materials have a low solar reflectance index.

WATER EFFICIENCY	
<b>Items</b>	<b>Bassins du Havre</b>
Water Use Reduction	Water usage is 36% less than the water usage baseline calculated for the building thanks to water-saving toilets, sink faucets and shower heads (LEED certification requires a minimum of 20%).
Water Efficient Landscaping	Recaptured rainwater and overflow from the basins will be used for irrigation purposes, reducing by 100% the potable water consumption required for irrigation. Potable water will only be used in cases of shortage.

ENERGY AND ATMOSPHERE	
Items	Bassins du Havre
Fundamental Commissioning of Building Energy Systems	The engineers Bouthillette Parizeau have been designated as the Commissioning authority to lead, review and oversee the completion of the LEED commissioning process.
Minimum Energy Performance	The building performance complies with the standards of the Model National Energy Code for Buildings 1997
Fundamental Refrigerant Management	No chlorofluorocarbon (CFC)-based refrigerants are used in the heating, ventilating, air conditioning (HVAC) and refrigeration systems.
Optimize Energy Performance	The building energy performance will yield cost savings of 31%.
On-Site Renewable Energy	Rooftop solar panels will contribute to heating a portion of the domestic hot water and will heat the pool water.
Enhanced Refrigerant Management	The HVAC and refrigeration equipment complies with required standards.

MATERIALS AND RESOURCES	
<b>Items</b>	<b>Bassins du Havre</b>
Storage and Collection of Recyclables	An easily-accessible area is dedicated to the collection and storage of recyclable materials for the entire building.
Construction Waste Management	92% of construction debris is recycled.

INDOOR ENVIRONMENTAL QUALITY	
Items	Bassins du Havre
Minimum Indoor Air Quality Performance	The ventilation system meets the minimum requirements of ASHRAE 62.1-2007, Ventilation for Acceptable Indoor Air Quality.
Environmental Tobacco Smoke (ETS) Control	It is forbidden to smoke in common areas and within 25 feet of entries. The ETS transfer among dwelling units meets the requirements.
Construction Indoor Air Quality (IAQ) Management Plan: During Construction	An IAQ Management Plan meeting the recommended control measures of the Sheet Metal and Air Conditioning Contractors National Association has been implemented.
Construction Indoor Air Quality Management Plan: Before Occupancy	Air quality tests were performed and concentrations of contaminants are below the acceptable standards.
Low-Emitting Materials: Adhesives and Sealants	All adhesives and sealants used on the interior of the building comply with the requirements of the South Coast Air Quality Management District (SCAQMD) Rule #1168.
Low-Emitting Materials: Paints and Coatings	Paints and coatings applied to interior walls and ceilings meet the requirements established in Green Seal Standard GS-11, Paints.
Low-Emitting Materials: Composite Wood and Agrifibre Products	Composite wood and agrifibre products, as well as laminating adhesives for assemblies, used on the interior of the building do not contain any added urea-formaldehyde resins
Controllability of System: Lighting	All occupants are able to adjust the lighting to suit their needs and preferences.
Controllability of System: Thermal Comfort	All occupants have an individual thermal control system.

Thermal Comfort: Design	The HVAC systems and the building envelope meet the requirements of ASHRAE Standard 55-2004, Thermal Comfort Conditions for Human Occupancy.
Views	90% of all regularly occupied areas have direct line of sight to the outdoor environment via vision glazing between 30 inches and 90 inches above the finished floor.



INNOVATION IN DESIGN (Exceptional or innovative performance)	
Items	Bassins du Havre
Innovation in design	90% of indoor and outdoor lamps have reduced mercury content.
Innovation in design	Exceptional performance of Development Density and Community Connectivity
Innovation in design	Exceptional performance of underground parking.
LEED Accredited Professional	An architect at IBI-CHA, the architects of the project, is a LEED Accredited Professional.