



DEVELOPMENT AND CONSTRUCTION OF THE FIRST TO BE LEED-CERTIFIED GEOS-SPA



**ECOLOGICAL SITE MANAGEMENT**



- Control of soil erosion during construction;
- Replacement of all the trees cut down during construction;
- Annual planting of additional trees.

**Lighting**

- Control of outdoor light pollution.

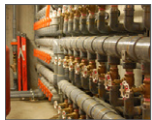
**EFFICIENT MANAGEMENT OF WATER**



- Recovery system for wastewater;
- Reuse of gray water for toilets;
- Filtering and environmentally friendly water treatment;
- Low-flow shower heads and faucets;

- Shower timers;
- Reduction of at least 30% in water consumption, compared to conventional designs;
- Reduction of at least 40% in discharged waters, compared to conventional designs.
- Toilets with Ultra Low Flush (ULF)

**ENERGY AND ATMOSPHERE**



**Geothermics**

- Used to heat interior floors, interior and exterior basins, and exterior sidewalks;
- Building 65% more efficient than the MNECB benchmark;

- 24 wells over 150 metres in depth.

**Recovery of energy**

- Recovery of heat from discharged water;
- Recovery of heat from ventilation equipment.

**Lighting**

- Use of a low-energy lighting system.

**Also**

- The equipment coolant is harmless for the ozone layer.

**QUALITY OF INTERIOR ENVIRONMENTS**



**Windows**

- Natural lighting in 80% of rooms.

**Ventilation**

- Increased efficiency of the ventilation system;

- Controlled by the occupants.

**Also**

- Use of low-emission stains, paints, adhesives and sealers.

**MATERIALS AND RESOURCES**

Priority was given to local materials and resources



**Wood**

- Use of FSC-certified wood for more than 85% of the building.

**Doors and windows**

- Made from recycled glass;

- Insulation levels exceeds National Building Code requirements;
- Purchased locally.

**Concrete**

- Use of concrete made from blast furnace residues and recycled materials in interior heated floors and exterior sidewalks.

**Management of construction waste**

- Rerouting of more than 75% of construction waste from landfills;
- Recycling of wood, steel, cardboard, plastics, gypsum, etc.

**Also**

- Extensive use of recycled materials;
- Structural and reinforcing steel made with recycled materials;
- Gypsum made with recycled materials.

Geos-Spa capacity : 150 people simultaneously / 300 people per day Job creation : 26 permanent jobs in 2009.



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