

ARBUTUS BUILDING

Coast Capital Savings Library Expansion



LOCATION

Surrey, BC

COMPLETION

2009

ACHIEVEMENT

USGBC LEED Gold

AREA

5,363m²

BUDGET

\$16,100,000

MATERIALS & RESOURCES

- Materials were selected for their recycled content and local availability
- Structural elements are comprised of high fly ash cast-in-place concrete construction and steel construction
- Over 95% of all the virgin wood used is FSC certified

INDOOR ENVIRONMENTAL QUALITY

- The library features an interior biowall providing an air quality benefit to the occupants as well as an aesthetic connection to the outdoors
- All the finishes inside the building use low-emitting products to minimize air pollutants
- Lighting power is reduced by 50% by the daylight from rooftop skylights

ENERGY & ATMOSPHERE

- The library is designed to perform as passively as possible and responds to the outdoor microclimate conditions

- 100% outdoor air is supplied to the building by trickle vents
- Exhaust air is removed via wind towers on the roof
- During winter months, a heat recovery system is employed to capture heat from the building
- Radiant in-floor heating and cooling loops are coupled to a geo-exchange plant to further reduce energy demand

WATER EFFICIENCY

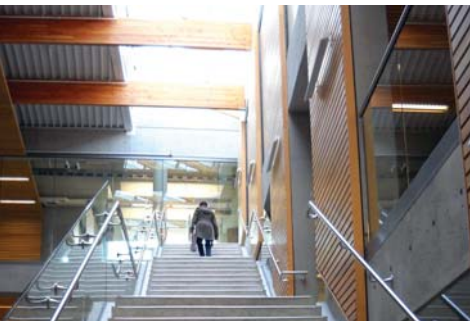
- The landscaping surrounding the building does not use an irrigation system
- Amount of potable water used is reduced by 37.5% by using water efficient faucets and water closets

GREEN CLEANING

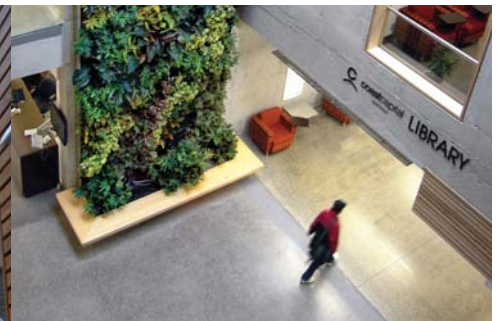
- Kwantlen Polytechnic University instituted a green cleaning policy
- All products used to clean and maintain the buildings, campus wide, are either Green Seal or Eco Logo Certified.



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Features an interior biowall providing an air quality benefit to the occupants