## SUSTAINABLE DESIGN: THE HUMAN FACTOR

## **Canadians Spend 90% of Their Time Indoors**

Canadians, though typically thought of as "outdoorsy," actually live most of their lives indoors. When we do open the door to go out, the majority of us are in cities. As such, human health is in many ways influenced by designers' consideration for the quality of the interior environments of buildings and the shape and form of cities and neighbourhoods.

Urban sustainability and human health are inextricably linked. Sustainable neighbourhood design must address the well-being of its residents, affording people access to clean air and water, and places to play, socialize and be active. A green building must provide a healthy environment in which people can eat, sleep, learn and work. If a building is resource efficient and built with

the most sustainable materials and processes, but does not provide healthy interior environments for its occupants, it cannot be called sustainable.

At the design level, outdoor health is addressed by creating opportunities for physical activity, clean air, places for leisure and recreation, and safe, walkable streets. Indoor health revolves around air quality, ventilation, non-toxic and clean environments, thermal comfort, daylight and views to the outdoors, and a regular supply of fresh air. The design of the man-made environments in which we live affects the quality of our lives immensely, and can be measured by our happiness, productivity and physical and mental health.



East Elevation

West Elevation





mechanical design consultant, explains the design rationale for building exterior accessways that face onto a courtyard. In the Net Zero building (see 'Vision + Concept' on page 16), "it was important to get corridors to living closer together and sharing things."

enclosed and some open to the elements. "The goal was to create streets in the sky," says Roger Bayley, design manager for Millennium Water. Bayley refers to the care taken in the design of the buildings' outdoor environments. Largely vegetated, and boasting water features and places to relax and play, the courtyards and gardens contribute to a sense of healthy living.

