

An architectural rendering of a modern residential complex at dusk. The scene is dominated by a tall, glass-walled tower on the right and several interconnected levels of terraces and walkways. The sky is a deep, dark blue, and the building's lights are beginning to glow. In the foreground, a paved walkway with a grid pattern leads through a landscaped area with trees and people. The overall atmosphere is serene and sophisticated.

Vancouver Residences

Vancouver, British Columbia

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ARCHITECTURE

Vancouver Residences

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This Vancouver Residential Development, still in design, will be a highly efficient, dense residential development in the heart of the city. The project is designed to support a series of sustainable objectives in line with Vancouver's Ecodensity Charter. It aims to greatly improve the city's "eco-footprint" and encourage residents to live more sustainably.

SERVICES

Architecture

CLIENT

Emaar Properties Canada

FUNCTION

Residential

FACTS

8,400 sm building area

AWARDS

International Architecture Award, 2010

The low-rise development features residential units, each with quality, durable, sustainable finishes. Each unit features an outdoor terrace and operable windows, with views to the community gardens and green landscape surrounding the building.

A central garden space provides an outdoor lobby entrance to the building and includes rain gardens and spaces landscaped with indigenous vegetation. Other community amenities include a lap pool, fitness center, multi-purpose activity room and working rooftop gardens for urban agriculture to encourage residents to grow their own produce.

The natural Vancouver environment is incorporated throughout the project; vegetated walls and permeable paving take advantage of the moist west coast climate. Deciduous trees are used to maximize natural shading in the summer months and horizontal shading elements are incorporated on the south facades. The wall system incorporates vertical shading and minimizes direct heat gain on the east and west elevations.

To achieve a significantly reduced eco-footprint for this residential development, AS+GG defined a series of goals for the project. These goals include:

- Reducing travel impact through increased density and access to public transport as well as an on-site car-share location. This increased density also encourages local businesses to move into the neighbourhood
- Lessen the environmental impact of food by offering working gardens for on-site food production, composting and recycling
- Reducing domestic water use through integration of water reducing fixtures, systems for rainwater collection and use, and on-site water treatment
- Reducing energy consumption through efficient compact living spaces, integration of geothermal systems, thermal massing, solar hot water, passive shading, radiant heat and cooling systems and energy-efficient appliances and lighting

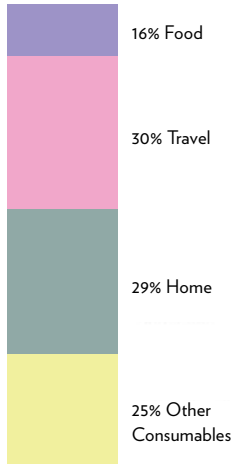
The Vancouver project is also investigating use of biomass fuel, is designed to take full advantage of natural light and incorporates solar thermal.







TYPICAL ECO-FOOTPRINT:



ELEMENTS THAT MAKE UP AN ECO-FOOTPRINT:

Transportation and Travel

- Encourage use of public transportation
- Provide on-site car share
- Reduction of air travel
- Reduction in private automobile use

Energy Consumption

- Sustainable technologies
- Energy efficient appliances and lighting
- Adjust temperature/humidity comfort zone
- Purchase green power
- Live in a smaller, denser footprint

Water

- Water reducing fixtures
- Rainwater collection
- No potable use for irrigation
- On-site water treatment
- Reduce personal domestic water consumption

Shopping

- On-site food production
- Use your own re-usable shopping bags
- Reduce consumer purchasing
- Reduce number of household pets

House and Garden

- On-site food production
- On-site composting
- Drought tolerant landscaping

Waste

- Recycling
- Composting

Community Action

- Education program
- Community volunteer program

Food

- On-site food production
- Purchase less processed foods
- Purchase foods with less packaging
- Eat locally grown foods
- Eat less meat and dairy

** Elements that thoughtful design can influence*



The ecological footprint concept is based on the idea that for every item of material or energy consumption, a certain amount of land in one or more ecosystem categories is required to provide the consumption related resource flows and waste sinks. Based on the goals and strategies proposed for the project, thoughtful design can reduce the inhabitants eco-footprint.

