

Residential [Large] AWARD

ACTON OSTRY ARCHITECTS INC.



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Jury comments: *An innovative approach to high density urban living that takes advantage of Vancouver's relatively mild climate to incorporate a courtyard typology to optimize the use of available site area. The project configuration promotes casual encounters and social interaction between residents and includes an accessible roof, with play space for children, raised planters for community gardening and a dog-walking area, providing a level of amenity that is rare if not unprecedented in a rental building.*

The Duke Vancouver, BC

Completed in March 2018, The Duke is a LEED Gold target, rental residential project designed under the City of Vancouver Rental 100 Secured Market Rental Housing Policy, which allows height and density limits in strategic locations in the city to be rezoned in exchange for provision of 100% rental housing.

Located near a busy transit-oriented node in Vancouver's Mount Pleasant neighbourhood, the 15,260 m², 14-storey, mixed-use project includes 201 rental units, with a small ground floor retail component, all compactly contained in an open-air atrium court building typology that is new to Vancouver.

In contrast to a traditional design approach that would typically feature a double-loaded corridor with units along both sides, the floor plan for The Duke instead features a single-loaded corridor with living units pushed to the outer edge of the site to create a central void space. Such a strategy substantially increases the number of units that can be accommodated on the site by maximizing the overall density within a prescribed 14-storey height limit.

A traditional double-loaded corridor approach would have made the project economically unviable as a rental property; whereas the strategic decision to push the units to the site perimeter made the development viable for rental housing.

The central void is transformed into a soaring, open-air circulation atrium over which a translucent Teflon canopy shields the space from the elements. The rental units are arranged around the perimeter of the trapezoidal-shaped site. This outdoor circulation space enables occupants to step out into a well-lit, weather protected environment designed to provide opportunities for residents to interact, even if only for a brief moment. An array of multi-coloured front doors further animates the central atrium space.

1. View at the intersection of E 11th Ave and Kingsway, with the 'slot' to the atrium denoted by the glass art installation suspended above the main entry.

2. The balconies of the two-bedroom units at the east end of the building.

PROJECT PERFORMANCE

Performance metrics for the LEED certification are:

- **Operating Energy:** 32% reduction in energy cost relative to an ASHRAE 90.1- 2007 Baseline
- **Water Consumption:** 37% reduction compared to reference building
- **Recycled Materials:** 21% by cost
- **Regional Materials:** 33% by cost
- **Waste Diversion:** 87% of demolition and construction waste diverted from the landfill

PROJECT CREDITS

CLIENT Edgar Development Corp

ARCHITECT Acton Ostry Architects Inc.

STRUCTURAL ENGINEER RJC Engineers

MECHANICAL ENGINEER Rocky Point Engineering Ltd.

ELECTRICAL ENGINEER MCW Consultants

LEED CONSULTANT The Integral Group

BUILDING ENVELOPE CONSULTANT Morrison Hershfield Ltd.

BUILDING CODE CONSULTANT Thorson McAuley Certified Professionals

ACOUSTICS CONSULTANT RWDI

LANDSCAPE ARCHITECT Durante Kreuk Landscape Architects

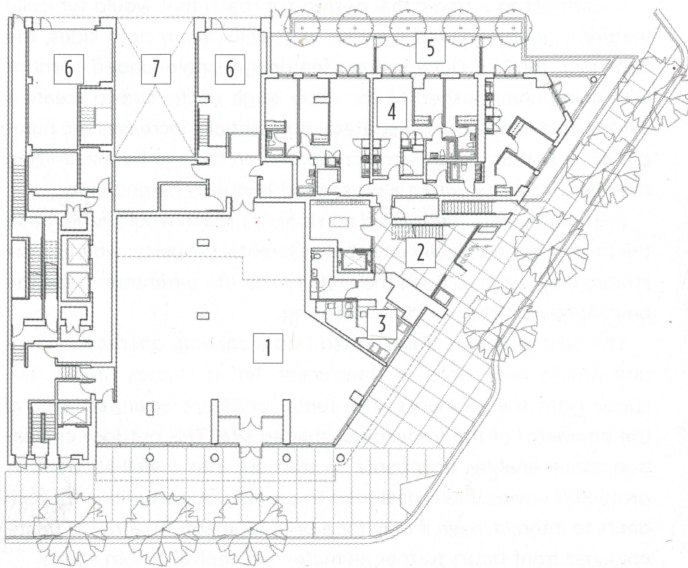
INTERIOR DESIGN Bob's Your Uncle Design Inc.

CONSTRUCTION MANAGEMENT Ventana Construction Corporation

PHOTOS Michael Elkan Photography

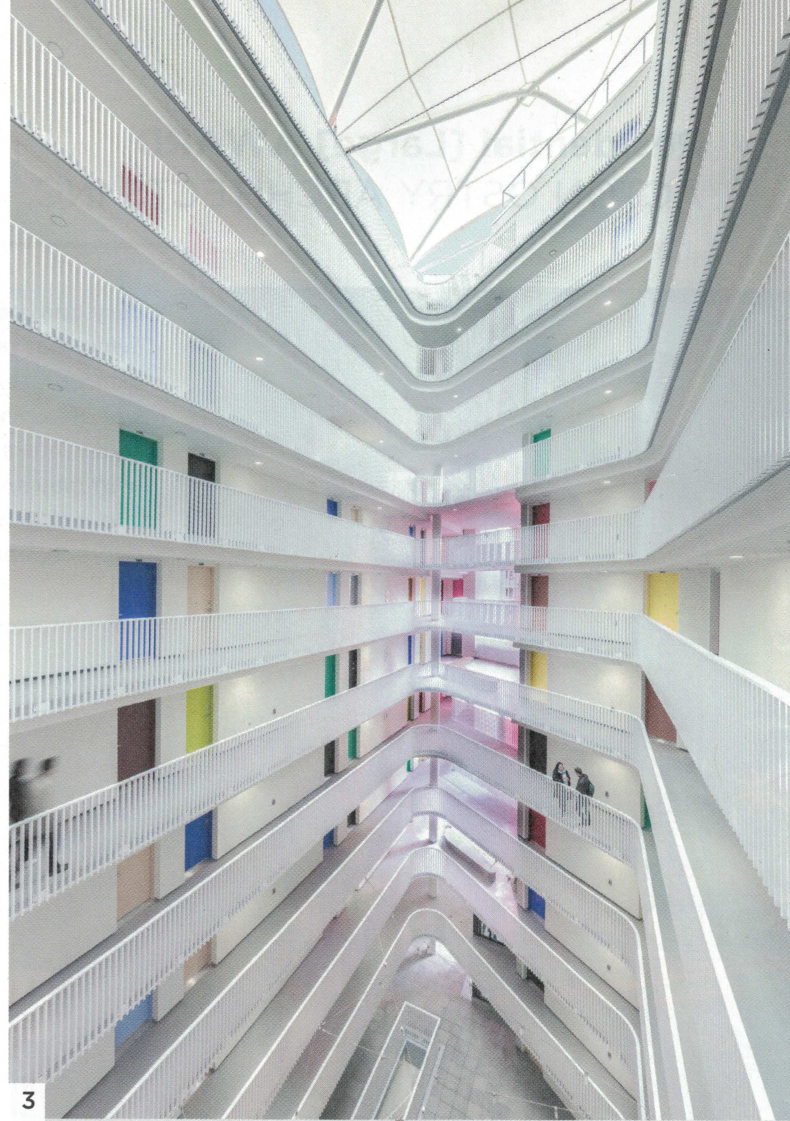
3. The spatial quality of the interior open-air trapezoidal atrium is enhanced by the play of multi-coloured entrance doors against a white backdrop.

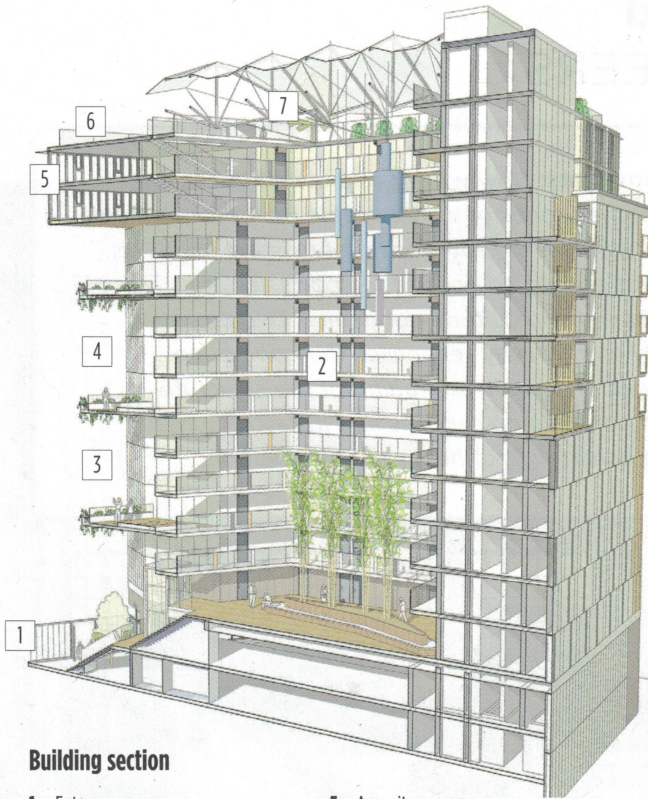
4. The atrium topped with a high-tensile steel and Teflon membrane structure.



Ground floor plan

- | | | |
|------------------------|---------------|------------------|
| 1 Commercial | 4 Rental unit | 6 Loading |
| 2 Residential entrance | 5 Terrace | 7 Parking access |
| 3 Rental manager | | |





Building section

- 1 Entry
- 2 Open-air atrium
- 3 Slot
- 4 Communal terraces
- 5 Amenity rooms
- 6 Communal roof terrace
- 7 Translucent canopy

Opportunities for extended social interactions are encouraged through the incorporation of several amenity spaces sprinkled throughout the development including: a courtyard with planters and extensive bench seating; landscaped terrace spaces located in a south-facing vertical slot through which a suspended glass art installation admits diffused fuchsia-coloured light; two upper-level amenity rooms; and a spectacular communal roof terrace that features a children's play area, dog-friendly space, a social seating and barbeque area, and urban agriculture planters.

The majority of the rental units are studios; however, policy required that 25% of the units be two-bedroom to accommodate families. These units are located at the corners and have larger balconies. Together with the rooftop play area, this helps make urban living more attractive for those with young children. *This project was previously published in SABMag issue #62, Winter 2019.*

5. and 6. One bedroom and studio apartments. Units are open in plan for maximum daylighting. Thermal batt/acoustic insulation by **Owens Corning**.



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