One Burrard Place / The Offices at Burrard Place

Canadian Consulting Engineering Awards 2023

April 12th, 2023

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Project Highlights

Located in downtown Vancouver, Burrard One and The Offices are the first two buildings in Burrard Place's multi-tower complex, showcasing innovation in sustainable high-end residential and commercial design.

Burrard One is a 54-storey tower, the city's third-tallest building, while The Offices stand 13 storeys plus a substantial below-grade garage. Completed in August 2022, MCW provided both mechanical and electrical engineering consulting services. One Burrard Place showcases several innovative engineering principles and techniques, including the advanced MEP systems used in the building. The HVAC system in the building is designed to be highly efficient and sustainable, utilizing a combination of heat recovery, chilled beams, and underfloor air distribution (UFAD) to reduce energy consumption and improve indoor air quality. The UFAD system delivers air at floor level, which is more comfortable for occupants and reduces the amount of energy needed to move air through the building. Additionally, the HVAC system utilizes a heat recovery system to capture and reuse heat energy from exhaust air, reducing the amount of energy needed to heat the building.

The electrical system in One Burrard Place also incorporates several advanced technologies to improve efficiency and reduce waste. The building utilizes a high-performance lighting system with occupancy sensors and daylight harvesting to minimize energy consumption. Additionally, the electrical system includes a demand response system that can automatically adjust power usage during periods of peak demand, reducing strain on the electrical grid. The plumbing system in the building also incorporates several sustainable features to reduce water consumption, such as rainwater harvesting and low-flow fixtures and toilets.

In addition to the MEP systems, One Burrard Place also utilizes advanced structural engineering techniques to ensure the building's stability during an earthquake, as well as modular construction and building information modeling (BIM) to streamline the construction process and minimize waste.

Overall, One Burrard Place demonstrates an innovative application of engineering principles and techniques through its advanced MEP systems, seismic engineering, modular construction, and BIM techniques, among other features. These innovations contribute to the building's sustainability, efficiency, and overall performance, making it a showcase of engineering excellence.



One Burrard Place provides numerous social and economic benefits to society. As a mixed-use development, the building includes residential, office, and retail space, which provides a vibrant and diverse community that contributes to the vitality of the surrounding neighborhood through ongoing operations. The building's location in downtown Vancouver also provides convenient access to public transportation, reducing the need for cars and promoting sustainable transportation options. In terms of economic benefits, the project created numerous jobs during the construction phase and has continued to support the local economy through ongoing operations.



One Burrard Place prioritizes environmental sustainability in several ways. With the sustainable design elements to both the interior and exterior of the buildings, both facilities are registered LEED, and are targeting Gold for both New Construction and Major Renovations, and Core and Shell Development.

This building was constructed using sustainable materials, including locally sourced and recycled materials, to minimize the project's environmental footprint. The design incorporates passive solar strategies, such as shading devices and high-performance glazing, to reduce energy consumption for heating and cooling. It also includes a high-efficiency mechanical system and utilizes reclaimed water for irrigation and toilet flushing, reducing overall water consumption.

One if it's most easily identifiable sustainable designs is the Energy Bridge. Both facilities share an amenity podium, unified landscape, and a pedestrian overpass. This overpass, known to the team as the Energy Bridge, not only allows people to move between buildings, but also facilitates energy sharing in the form of heating and cooling between the office and residential occupancies.



The client's main project goals for One Burrard Place were to create a high-quality mixed-use development that contributed to the vitality of the surrounding neighborhood while prioritizing sustainability and innovation. To meet these goals, the project team worked closely with the client to develop a design that incorporated advanced engineering techniques and sustainable features while also creating a vibrant and diverse community. Throughout the design and construction process, the team prioritized collaboration and communication to ensure that the project met the client's vision and exceeded their expectations.

Project Team: MCW Group of Companies Reliance Properties Turnbull Construction Project Managers office of mcfarlane biggar architects + designers inc. ITC Construction Group The Jim Pattison Auto Group IBI Group

Photography: Ema Peters

