

BNZ HARBOUR QUAYS



Project:	BNZ Harbour Quays
Completed:	June 2009
Developer:	CentrePort Wellington
Anchor Tenant:	BNZ
Contractor:	Fletcher Construction
Architect:	Jasmax
Tenant Fitout Architect:	Jasmax
Structural Engineer:	Beca
Service Engineer:	Beca
Quantity Surveyor :	Rider Levett Bucknell (basebuild)
Quantity Surveyor:	Davis Langdon (tenant)
Project Manager:	CentrePort (basebuild)
Project Manager:	RCP (tenant)
Gross Area:	Approximately 25,000 square metres
Office Area:	Approximately 19,000 square metres
Ground Floor Area:	Approximately 1,800 square metres
Floor Plates:	Between 3,600 – 4,300 square metres
Pier Floor Plate:	Between 1,000 – 1,200 square metres
	6 Storeys + plant

NZGBC Greenstar Rating: Accredited with a 5 star office design rating
NZGBC Greenstar Rating: Targeting a 5 star fitout design rating



THE CONCEPT

This project presented the challenge of providing a large-scale commercial workplace with a vibrant interior space, while also addressing the city in a high profile site within the Harbour Quays development. This can only be manifested through a truly collaborative arrangement between the developer, tenant and their respective teams.

The building is intended to present an openness and transparency to the exterior that gives insight to the activities within. Visual connection within and across the office spaces creates an environment that fosters community within the organisation. The outcome is an open and transparent workspace for the tenant and a highly articulated envelope.

The building is conceived as three low-rise office towers that are connected by 2 atria, which break up the internal spaces. The atria are substantial spaces in their own right, at 13 metres wide and rising to the uppermost tenancy floors. With fully glazed walls at both ends and saw-toothed, south-light roofs, the office spaces and atria are provided with good levels of natural light and views to the water.

... the design concept for this site was to maintain the ‘Dense to Openness’ idea of ‘City to Sea’ and the integration of a view shaft down each pier...

Openness, Community & Transparency... THE ARCHITECTURE

With the exception of the upper-most level which is glazed, all the office floors are directly open to the shared atria spaces, allowing for a sense of community to develop across the whole organisation. Cantilevered walkways and bridges activate the atria at all levels to provide coincidental meeting opportunities for staff, enlivening the spaces and reinforcing the bank’s workplace culture.

Three sets of stairs provide the primary day to day vertical circulation for the 5 storeys of office space. This allows an individual access to 40 - 60% of the organisation within one flight of stairs either up or down. The stairs are wide and generously proportioned and two have fire rated glass end walls, situated within the atria.

The bones... STRUCTURE AND OTHER FUNDAMENTALS

The building is situated on reclaimed land which has the potential for soil liquefaction in an earthquake. This is alleviated by improving the ground conditions with vibro-compacting hundreds of gravel columns. To address varying soil conditions polymers were used for the first time in New Zealand for pile stabilisation.

A structural system made up of a reinforced concrete perimeter frame, with 17 metre long pre-cast concrete floor units, provides clear open floor plates in excess of 1000 square metres.

The structure plays a key part in articulating the concept of transparency. The perimeter frame was wrapped with two other structural types. To the east (harbour side) and west (Waterloo Quay) a composite steel/concrete decking and steel structure was adopted, while the lane facades have cantilevered floor slabs beyond the primary frame. Both of these structures allow a thin slab edge and consequently floor to floor glass. This is essential to the ‘lightness’ of the building.

The atria bridges provide circulation between the three piers at each level and seismically tie the buildings together. In the event of an earthquake seismic movement is absorbed by sliding joint details. The fire design is absolutely fundamental to the operation of the building. It is effectively one single fire cell, requiring complex smoke spread & egress modelling. The outputs of this modelling determined that the building needed to be served by 5 stairs and 8 huge smoke extract fans mounted on the roof. Each fan is 1.8m in diameter, with 40 m3/s design extraction.

The business enabler... WORKPLACE STRATEGY

The core concept was to create a workplace that acts as a business enabler. The physical environment is open and transparent, enhancing business activities of the occupants. The design aims to be energising in both image and form, demonstrating a level of sophistication and dynamism through design and use of materials. The variety of materials, spaces, forms and colours

in the space responds to the site and BNZ’s rich heritage.

The idea of ‘one organisation heart’ has been implemented to create an inclusive culture and be a reflection of the ‘one financial institution’. Walls between business units have been removed and the open office environment allows integration across all floors, creating an enhanced feeling of ‘connectedness’ across the business.

A fundamental objective of space planning was to create a clear separation between the dynamics of active spaces and focused work spaces. Furniture is selected to enhance flexibility and the overall workstation layout is designed to expand and contract with the requirements of the business. A variety of configurations and styles of workstations further enable the work styles of the diverse business unit profiles.

The light we see and the air we breathe... ENVIRONMENTALLY SUSTAINABLE DESIGN

From the very start of the design process the team pursued a rigorous environmental and sustainable approach to design. With the introduction of the Greenstar NZ Office Design rating system in 2007, it was decided that the building design would target a Green Star NZ - Office Design 5 Star rating. This was in line with CentrePort’s aspirations for all new buildings within the Harbour Quays precinct and with Bank of New Zealand’s three building projects in Auckland and Wellington.

SUSTAINABLE DESIGN FEATURES OF THE BASE BUILDING AND TENANT FITOUT INCLUDE:

Indoor Environment

- 100% improvement on standard ventilation rates
- CO2 Air quality monitoring
- Use of high frequency ballast fluorescent lighting
- Zoning of lighting
- Motion detectors to ensure that lights are not left on in unoccupied spaces
- Ability to programme the light output of light fittings to suit occupants and location
- Layout planning with good visual connection to outside views
- Reduction in noise levels through use of materials and acoustic absorptive material

Use of water efficient fittings

- Waterless urinals
- Low flow taps
- Low flow showers
- Low volume and dual flush toilets

Rainwater harvesting

- Rainwater is collected from the roof, filtered, and then used to flush toilets.

Transport

- Close proximity to transportation hub, providing easy access to train and bus routes
- Cycle facilities are provided with secure and sheltered bike parks for staff and visitors.
- Shower and lockers well in excess of NZGBC numbers are provided
- Transport planning to encourage staff to move to environmentally friendly transport methods

Materials that minimise the impact on the environment

- Environmental choice paint, gib lining and carpet
- Selection of workstations, chairs, joinery and ceiling to meet sustainable requirements
- Recycling of building waste
- Environmentally friendly floor coverings including basalt, recycled rubber and bamboo
- PVC free Blinds and window film
- Environmentally friendly refrigerants and insulation
- Low VOC adhesives and sealants

By establishing an organisation wide Environmental Policy as part of the BNZ’s broader corporate and social responsibility, Jasmax has provided an office space with a superior indoor environment. This environment reflects sustainability principles and enables the BNZ to operate efficiently and effectively.