

DOORS OPEN ON FIRST GREEN RETAIL BUILDING

The next Pathfinder project shows there is no need to wait for a rating system to adopt green initiatives. With the willingness of the whole team, a multidisciplinary approach and greater upfront planning, it is easy to incorporate sustainable features in building projects.

By **Charissa Snijders**, Charissa Snijders Architect Ltd, Auckland for Constructing Excellence NZ

There have been great inroads in sustainable housing, public facilities, schools and offices, but little if any progress in the retail sector. This is concerning since retail is a significant proportion of work in the building sector.

Recently, however, the new National Bank Blockhouse Bay opened its doors, becoming the first green retail building in New Zealand, and possibly Australasia. This project provides a great example of how sustainable features can be incorporated into retail buildings.

Client drives green initiative

Senior project manager Ben Eitelberg saw an opportunity to do something different when the bank decided to build a new building – its

first in over 10 years. The idea of sustainability coincided perfectly with the bank's commitment to becoming carbon neutral by 2009.

Bringing the right team together helped achieve a sustainable outcome. The client had a longstanding relationship with ASC Architects, and chose Format Interiors, which had shown a commitment to sustainability with waste management initiatives on previous projects and been involved in green housing projects. LEED certificate architect Dean Shweddyk was the project architect and Jacques de Lange the contractor.

The team quickly found there was no local green rating tool specific to retail and, more surprisingly, there was no equivalent model overseas either. Rather than stop there, the client gained assistance and support from

Georgia Myers, national sustainability manager at Jones Lang LaSalle, and with the help of the team the project brief evolved.

The client had two mottos that let the team explore options and stretch the boundaries without fear of repercussions. These were:

- To gain the best value by spending as little as possible and achieving as much as possible.
- It's okay to fail, but we have to have tried.

Keep it simple

With no benchmarks to work from, a mixture of common sense and appropriateness shaped the decisions on which sustainable features to adopt. The client investigated life cycle costs with advice from experts, and soon realised that paying more initially usually gives benefits in



National Bank Blockhouse Bay.



This was the first new National Bank built in over 10 years.

Reasons for success were:

- client driven
- the right team, particularly the three key players: client, architect and contractor
- the team's willingness to work together
- decision to keep it simple
- changing the process to include the contractor's input early on
- the whole team, including the client, understood that sustainable buildings require greater detail early in the project.

Project	The National Bank Blockhouse Bay
Client	Property Group, ANZ National (Ben Eitelberg senior project manager)
Architect	ASC Architects (Graeme Scott and Dean Shwedyk project architects)
Contractor	Format Interiors (Jacques de Lange)
Region	Blockhouse Bay, Auckland
Sector	Retail
Total value	Planned budget \$1.5 million Sustainable features approximately 11% increase to initial costs
Timescale	December 2007–July 2008
Form of contract	NZIA SCC1

Sustainable features used

Water efficiency

Stormwater treated/rain garden; rainwater harvesting tank for toilets and cleaner's sink; low use plumbing fittings.

Solar water heating

Passive solar heating on roof to provide hot water to the shower and basins.

Shading strategy

Metal roofing with high reflectivity and emissivity; asphalt shaded by vegetation to reduce urban heat island effect; exterior sunshades.

Heating and cooling

Efficient HVAC air-conditioning in front of house and fresh air to back of house.

Lighting strategy

Natural sunlight with skylights; lights furnished with photo-sensors so artificial light levels are adjusted automatically when natural light levels are sufficient; all site lighting designed to avoid light pollution.

Vegetation

Rain garden (100 mm deep with overflow into storm water drain); plant strip in parking lot to provide shading for cars/bicycles; all site planting selected to avoid irrigation and also promote natural habitat.

Cabling

Teltrac trialling new, environmentally friendlier data cabling.

Signage

LED technology used more efficient but not common in exterior signage; reduced lighting illumination times.

Waste management

On site during construction.

Renewable resources

Regenerated timber joinery and architectural features; good quality wool fabric/carpet.

Materials

Low VOC paint; recycled aluminium window frames; 20% reuse of materials Gib; asphalt reused when resurfacing; long-run roof sheets and corrugated cladding contain 12% recycled iron; onsite timber reused for fencing; provision to separate recycling in kitchen; compost bin in rain garden.

the longer term. As a result, the bank adopted simple basic green initiatives and made small effective changes designed to save energy and the environment, rather than impress.

Contractor involved early

The client was also key in identifying that changes to the process were needed to reflect the multi-disciplinary nature of sustainable building. The contractor was brought on board during documentation to help in the design decision-making process. Greater levels of documentation were needed and details resolved at an early stage.

The project had an additional benefit of creating a strong team ethic so when challenges arose during construction, everyone was committed to finding a solution.

Since the building's occupation in July 2008, its energy, water use and air performance has been measured and monitored, as well as the staff experience through a post occupancy survey.

The outcome has been a simple building that reflects the simple approach taken to minimising its impact. Results will show how successful it is, and how long it takes for the initial 11% additional costs to be paid back.

In the meantime, the NZ Green Building Council has expressed an interest in using this project as a benchmark for retail building.

This is a Pathfinder Project, a scheme operated by The NZ Construction Clients Group for sharing, learning and innovating together.

See www.constructing.co.nz for a full report on this project. ◀



Features outside the building include the planting to shade vehicles and the rain garden at back of car park with compost bin.