







green building council australia

100 GEORGESTRE

GREEN BUILDING COUNCIL AUSTRALIA OVERVIEW

The Green Building Council of Australia's mission is to define and develop a sustainable property industry in Australia and to drive the adoption of green building practices through market-based solutions.

The Council's objective is to promote sustainable development and the transition of the property industry to implementing green building programs, technologies, design practice and operations. To do this, it advances and promotes the creation of a green building rating tool, economic incentives, government initiatives and programs, new technologies and industry knowledge.

CONTACT US

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GENERAL PROJECT DESCRIPTION

400 George Street, Brisbane is a 34 storey, 43529m² A-Grade commercial office building positioned on the corner of George and Turbot Streets in Brisbane's CBD. It comprises a tower of three rises totalling 41,119m² NLA, a mid rise recreational terrace, low rise food and service retail and basement car parking.

The objective behind 400 George was to create a thoughtfully designed, environmentally sustainable office environment with comprehensive supporting amenities

- a vertical village

To that end, tower floors utilise column-free floor plates that promote connectivity, creativity and productivity. A 3.1m floor to ceiling zone maximises daylight penetration and exposes panoramic views. The podium and ground floor house a food court, restaurant and coffee shop with provision for a gymnasium and crèche. Occupants can cycle to work, rack their bike in one of 290 secure racks and utilise extensive shower and change facilities. All forms of public transport, shopping malls and green spaces are a short walk away.

400 George Street, Brisbane is being developed by Joint Venture Partners Grosvenor Australia and Leighton Properties and was awarded a 5 Star Green Star – Office Design v2 rating in February 2008. It is on schedule for completion in late 2009.

400 GEORGE STREET BRISBANE

Address:

400 George Street Brisbane QLD 4000

Landowner:

HSBC Trinkaus Real Estate GmbH

Landowner and Developer: Grosvenor Australia Investments

Developer:

Leighton Properties Pty Limited

Technical Consultant:

Saltcoats Consulting Pty Limited

Building Certifier (BCA): Philip Chun & Associates

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Project Certifier:

Rider Levett Bucknall

Town Planning Consultant:

Buckley Vann

Leasing Consultants:

Jones Lang LaSalle, Knight Frank and CBRE

Valuer:

Landmark White

MANAGEMENT

- Green Star Accredited Professional on consulting team.
- Comprehensive building user's guide.
- Contractor (Thiess) will recycle more than 80% of construction waste.
- Comprehensive environmental and waste management plans.

INDOOR ENVIRONMENT QUALITY

- Ventilation system provides 50% more fresh air than a typical office building.
- 3,100mm floor to ceiling glazing around perimeter of office floors increases daylight penetration.
- Use of high performance glazing system reduces thermal loading but allows good daylight penetration.
- Formaldehyde minimisation.
- Low internal noise levels.
- Sweeping external views.
- Low VOC (volatile organic compound) carpets, glues and sealants.
- 95% of painted surfaces are low VOC.

ENERGY

- Five Star Australian Building Greenhouse Rating plus 20% CO, reduction.
- Approximate predicted savings of green house gas emissions equates to 2,604,000 kg of CO₂ per annum compared to a Four Star ABGR rated building.
- Energy efficient T5 lighting.
- Lights installed on 3150 x 2700 grid which reduces office lighting power density and saves energy.
- Extensive use of the BMS and movement sensors for common areas lights, which activate lighting only as required.
- Lighting in car parks operated after hours by movement sensors.
- Separate air handling units for each façade and the interior zone to eliminate reheat and maximize "economy-cycle" operation.
- High-efficiency chillers.
- $\bullet\,$ Variable speed car park ventilation fans controlled by $\mathrm{CO_2}$ sensors.
- \bullet Tenant metering and extensive electrical sub metering for plant and equipment.

TRANSPORT

- 290 secure bike racks approximately one for every ten employees.
- Extensive shower and change facilities.
- Excellent proximity to public transport.

WATER

- 8% reduction in potable water through the use of air conditioning condensate for toilet flushing.
- AAAA Water efficient fittings and fixtures.
- Waterless urinals.
- Low water usage cooling towers.
- Water for testing the fire services re-used for toilet flushing.

MATERIALS

- 20% cement replacement with fly-ash.
- 100% of reinforcing steel made from recycled steel.
- 100% FSC certified plantation timber.

LAND USE AND ECOLOGY

- Effective re-use of existing brownfield development site.
- Improvement in ecological value of the site.

EMISSIONS

- Ozone depleting substances avoided in building materials.
- Reduced flow to sewer due to water efficient fittings and fixtures.

INNOVATION

- MEVA re-useable formwork is an innovative approach to reduce more than 40,000m² waste plywood.
- Condensate recovery system and condenser water pumping system, which optimises energy use, are projected to save 702,100 litres of water and 116,500kg CO₂ per annum.

OVERALL GREEN STAR BUILDING PERFORMACE

