









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

167 Westralia Plaza is a 12 storey office and retail building. The NLA of the office is 10,900 m², and there is a 180m² restaurant tenancy and approximately 400m2 of retail tenancies at ground (plaza) level, and two basement carpark levels accommodating 57 car bays. The office building received a 4 Star Green Star – Office Design v2 certified rating in August 2007.

The façade has a relatively low panel height of solar controlled double glazing. It has a low transmission heat value and a good shading coefficient of around 0.3. The exterior also sees the implementation of fixed vertical and horizontal shading fins.

High efficiency air conditioning and lighting systems are incorporated throughout the building, along with solar powered hot water heating and low water usage WCs, urinals, taps and showers.

167 WESTRALIA PLAZA

Address:

167 St Georges Terrace, Perth WA 6000

Insurance Commission of WA

Project Manager:

George Georgiu PDC Project Management

Gary Wrightson Insurance Commission of WA

Architect:

Andrew Rogerson, Paul Steed, Stephen Pennock Jones Coulter Young Pty Ltd

Mechanical and ESD:

Sven De Jonghe Bassett Consulting Engineers

Structural:

Donald MacMillan BG&E Pty Ltd

Electrical:

Keith O'Malley Best Consultants

Hydraulic:

Quentin Oma Hydraulics Design Australia

Phil Hues Connell Wagner

MANAGEMENT

- A Green Star Accredited Professional was a member of the design team throughout the project from concept design stage;
- The performance and energy efficiency of Building Services are improved through comprehensive commissioning;
- The performance and energy efficiency of Building Services are improved through a 12 month commissioning 'building tuning' period after handover;
- An independent Commissioning Agent will be engaged to monitor and verify the commissioning of HVAC and building control systems;
- A Building Users Guide has been provided for the benefit of occupants and managers; and
- The Building Contractor is required to prepare and implement a comprehensive Environmental Management Plan.

INDOOR ENVIRONMENT QUALITY

- Carbon Dioxide levels are monitored to facilitate continuous monitoring and adjustment of outside air;
- High Frequency Ballasts are specified to avoid low frequency 'flicker' associated with fluorescent lighting;
- Ambient internal noise levels are maintained at appropriate levels in accordance with Australian Standards;
- Paints, carpets and sealants have been selected which meet the benchmarks for low Volatile Organic Compound content;
- Composite wood products have been selected with low formaldehyde emissions; and
- A dedicated tenant exhaust riser is provided so that air pollutants can be removed from printing & photocopy areas.

ENERGY

- The building will achieve a 5 ABGR star rating if all the ABGR protocol input parameters are upheld;
- Major energy using equipment is sub-metered to enable energy monitoring of base building services;
- Electrical sub-metering is provided for each floor and tenant to enable energy monitoring by tenants;
- Office lighting is designed to reduce power consumption whilst achieving the required illumination levels;
- Office lighting is zoned to allow for individual switching of small areas less than 100m2; and
- Peak energy demand reduction strategies are incorporated, allowing building management to use the standby generator to provide power during peak periods.

TRANSPORT

- Over 25% of parking bays are dedicated to 'Small Cars'and motorcycle & moped parking to encourage the use of smaller, more fuel efficient vehicles for commuting;
- Extensive cycling facilities are provided to encourage the use of bicycles for commuting;
- A secure storage area is provided, including lockers for each bicycle space;
- Shower and change facilities are provided for males & females, plus a unisex accessible shower facility; and
- Building is in close proximity to public transport network, including buses, trains and ferries.

WATER

- Water fixtures are selected for efficiency of water usage;
- Water consumption is managed and monitored through use of water meters and sub-meters, which are linked to the Building Management System;
- Cooling Tower system is designed to use water efficiently; and
- Water used in Fire System testing and maintenance is retained for landscaping.

MATERIALS

• The building design has minimised the use of PVC products

LAND USE AND ECOLOGY

- The development has occurred on land that is of limited ecological value; and
- The development has re-used land which has been previously developed;

EMISSIONS

100%

• A refrigerant leak detection system is incorporated.

OVERALL GREEN STAR BUILDING PERFORMACE

