





green building council australia

# QUAD

# 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

Through the commitment and enthusiasm of the owner and the project team, Quad 4 has achieved a 5 Star Green Star – Office Design v2 Certified Rating; representing 'Australian Excellence' in sustainable office design. The Certified Rating was awarded in January 2007.

Quad 4 is a new A Grade commercial office building at Sydney Olympic Park. The project is the last building in the Quad Campus development which comprises a total of four office buildings that have been master planned around the garden circle café.

Sustainable features contributing to the achievement of 'Australian Excellence' includes extensive water reuse and recycling onsite, achievement of maximum category score in Water, passive chilled beams, low VOC finishes, and sub-metering of energy and water.

# HUME CITY COUNCIL OFFICE BUILDING

Address:

8 Parkview Drive, Sydney Olympic Park NSW 2127

Owner:

The GPT Group

**Developer:** The GPT Group

Sustainability Consultant, Electrical and Hydraulic:

Lend Lease Design

Architect:

Cox Richardson

Mechanical:

The Oak Group

Mechanical: The Oak Group

Structural:

Arup

Civil:

Hyder

Quantity Surveyor, Project Management and Construction:

Bovis Lend Lease

Development Management: Lend Lease Development

# **MANAGEMENT**

- Green Star Accredited Professional engaged from the commencement of the design phase
- Extensive commissioning in accordance with ASHRAE and CIBSE Standards
- Quarterly commissioning tuning to be carried out after handover
- Appointment of an Independent Commissioning Agent to review, orchestrate and manage commissioning process
- Provision of a Building Users' Guide to all building staff
- Comprehensive Environmental Management Plan implemented by Bovis Lend Lease
- Waste Management Plan to divert of 80% of construction waste from landfill

# INDOOR ENVIRONMENT QUALITY

- Office space cooled with passive chilled beams to improve IEQ
- Outside air rates 50% above Australian Standard requirements
- Swirl diffusers used to ensure effective delivery of air into the office space CFD modelling carried out to demonstrate
- Once through 100% fresh air system no recirculation of air
- Glare control through external shading devices
- High frequency ballasts to increase workplace amenity
- Approximately 70% of NLA within 8m of vision glazing
- High thermal comfort performance
- Building fabric and services designed to maintain acoustic comfort
- Use of low off gassing materials throughout building including paint, carpet, adhesives and sealants
- Use of low-emission formaldehyde products
- Active humidity control
- Tenant exhaust riser sized to effectively remove indoor pollutants

#### **ENERGY**

- Passive chilled beams, premium efficiency plant, and high performance façade and building fabric design to achieve predicted ABGR performance (measured in terms of CO2 emissions) of 5 Stars plus 20%
- All major base building electricity uses and tenant power sub-metered to allow for effective monitoring and management of electricity consumption
- Efficient lighting design
- Lighting zones no greater than 100m²

# **TRANSPORT**

- Cyclist facilities provided for 5% of building staff as well as visitors to the building
- Good public transport with train and bus services available to the site with links to nearby major transport hubs

### WATER

- High efficiency fixtures and fittings including waterless urinals
- All WCs to be flushed with recycled water provided by the Water Reclamation and Management Scheme (WRAMS)
- Water meters for all major water uses and interfaced with the BMS for monitoring and management of water consumption and to provide a leak detection system
- Efficient landscape irrigation system using only recycled water supplied by the WRAMS
- Cooling towers designed to achieve greater than 6 cycles of concentration and use only recycled water supplied by the WRAMS
- All fire system test water to be reused

# LAND USE AND ECOLOGY

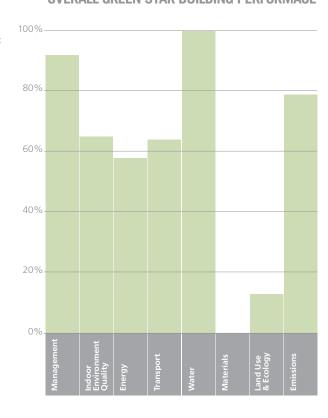
- Development is not on land with a high ecological value
- No threatened flora or fauna located on the development site



#### **EMISSIONS**

- 100% of refrigerants to have an ODP of zero
- Refrigerant leak detection and recovery systems to minimise negative impact from refrigerant leaks
- All stormwater collected, treated and filtered through the WRAMS
- All greywater and blackwater collected, treated and made available back to the site through the WRAMS
- External lighting designed to minimise light pollution

# **OVERALL GREEN STAR BUILDING PERFORMACE**



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